内容 CONTENT

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

公司簡介 COMPANY OVERVIEW

鐵研科技(TAK©)，代表著我們對技術(Technology)、品質保證(Assurance)和领先者(Keeper)的承諾和堅持。成立於1996 年，我們是一家專業生產磁性鐵氧體(Ferrite)的公司，致力於為各種產業提供高品質的磁性材料解決方案。隨著多年的發展，我們已在中國和台灣建立了多個生產基地和研發中心，不斷擴大我們的市場份額和產品範圍。
TAK© embodies our commitment to technology, quality assurance, and leadership. Established in 1996, we specialize in the production of magnetic ferrite materials, providing high-quality magnetic material solutions for various industries. Over the years, we have established multiple production bases and research centers in China and Taiwan, continuously expanding our market share and product range.

自 1996 年成立以來，鐵研科技一直秉持著技術創新和品質保證的理念，在行業中贏得了良好的聲譽。以下是我們的主要發展里程碑：
1997 年：在中國東莞石碣設立分廠，並通過 ISO9001 認證，這標誌著我們公司對品質管理的承諾和成就。
2000 年：開始生產 Mn-Zn 產品，標誌著我們公司對產品多樣化的探索和實現。
2004 年：成功收購法國公司汤姆逊在台灣的工廠，進一步擴大了我們的生產規模和市場份額。
2005 年：在中國河源連平成立河源鐵研電子科技有限公司，這一步驟標誌著我們對中國市場的戰略布局和投資。
2006 年：建立镍锌铁氧体年产 3000 顿产能生产线、锰锌 1000 顿产能生产线。
2010 年：锰锌铁氧体生产线增加投入到每年 2000 顿产能。
2013 年：通过 IATF16949 认证。
2020 年：针对高频应用相继推出对应的镍锌、锰锌材料，以对应云计算、大数据分析等计算机领域应用。
2021 年：导入新式伺服压机以及新式气氛箱式烧结炉以提升锰锌类产品品质。

Development Milestones
1997：Established a branch factory in Shijie, Dongguan, China, and obtained ISO9001 certification, marking our commitment to quality management.
2000：Commenced production of Mn-Zn products, showcasing our exploration and achievement in product diversification.
2004：Successfully acquired Thomson's factory in Taiwan, further expanding our production scale and market share.
2005：Established Heyuan TAK Electronics Technology Co., Ltd. in Heyuan, China, marking our strategic layout and investment in the Chinese market.
2010：Increased the production capacity of Mn-Zn ferrite production line to 2000 tons per year.
2013：Obtained IATF16949 certification.
2020：Launched nickel-zinc and manganese-zinc materials for high-frequency applications, catering to computer fields such as cloud computing and big data analysis.
2021：We introduced state-of-the-art servo presses machine and atmosphere box-type sintering furnaces to enhance the quality of manganese-zinc products.

我们的产品主要应用于各种领域，包括但不限于以下：
电子产品：手提电脑、平板电脑、智能手机、液晶显示器、主机板、显示卡等。
通讯设备：无线路由器、基站天线、通信模块等。
电源电子：电源模块、变压器、滤波器等。
汽车电子：BMS、车载音响系统、车载导航、车载充电器等。
工业应用：工业电源、传感器、电动工具、电机等。
新能源：光伏变换器、风力发电控制器等。
Our products are primarily used in various fields, including but not limited to:
Electronic Products: Laptops, tablets, smartphones, LCD monitors, motherboards, graphics cards, etc.
Communication Equipment: Wireless routers, base station antennas, communication modules, etc.
Power Electronics: Power modules, transformers, filters, etc.
Automotive Electronics: BMS, Car audio systems, car navigation, car chargers, etc.
Industrial Applications: Industrial power supplies, sensors, power tools, motors, etc.

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

New Energy: Photovoltaic inverters, wind power generation controllers, etc.

我们将持续加大技术研发投入，不断追求创新和突破。未来，我们将着眼于以下方面的发展：
We will continue to increase investment in technical research and development, continuously pursue innovation and breakthroughs. In the future, we will focus on the following developments:

技术创新：通过持续不断的技术创新，我们将提高产品的性能和竞争力，满足客户不断提升的需求。
Technical Innovation: Enhancing product performance and competitiveness to meet the evolving needs of customers.

产品多样化：我们将继续拓展产品线，覆盖更广泛的应用领域，包括新兴领域如人工智能、物联网和新能源等。
Product Diversification: Expanding product lines to cover emerging fields such as artificial intelligence, the Internet of Things, and new energy.

质量提升：我们将不断优化生产工艺和质量管理体系，提高产品的稳定性和可靠性，树立品牌形象。
Quality Improvement: Optimizing production processes and quality management systems to enhance product stability and reliability, establishing a brand image.

市场拓展：我们将加强国际市场的拓展，积极参与全球竞争，不断提升自身的竞争力和影响力。
Market Expansion: Strengthening international market expansion, actively participating in global competition, and enhancing our competitiveness and influence.

可持续发展：我们将注重生态环保和社会责任，推动可持续发展战略，在环境保护和社会贡献方面发挥积极作用。
Sustainable Development: Focusing on ecological conservation and social responsibility, promoting sustainable development strategies, and actively contributing to environmental protection and social responsibility.

鐵研科技(TAK©)将以更加开放的姿态，不断适应市场变化，迎接挑战，为客户提供更优质的产品和服务，实现共赢发展！
TAK© will continue to embrace an open attitude, adapt to market changes, meet challenges, and provide customers with higher quality products and services, achieving mutual development and success!

鐵研科技有限公司 TAK Technology Co., Ltd.
地址：桃園市蘆竹區安中街 28 巷 5 號
Address: No. 5, Lane 28, Anzhong Street, Luzhu District, Taoyuan City, Taiwan.
TEL：886-3-2624980 FAX：886-3-2624950
e-mail：taiwan@takferrite.com
東莞鍶研電子有限公司 Dongguan TAK Electronics Co., Ltd.
地址：中國廣東省东莞市石碣镇东风南路 75 号 401 室
ADDRESS：Room 401, No. 75 Dongfeng South Road, Shijie Town, Dongguan City, Guangdong Province, China TEL：86-769-86310390 FAX：86-769-86310396
E-mail：sales6@takferrite.com
河源鐵研科技有限公司 Heyuan TAK Technology Co., Ltd.
地址：中國廣東省河源市連平縣元善鎮石龍工業園區
Address: Shilong Industrial Park, Yuanshan Town, Lianping County, Heyuan City, Guangdong Province, China.
TEL：86-762-4329901 EX.605 FAX：86-762-4329002
E-mail：sales6@takferrite.com

符號定義 SYMBOLS AND TERMS

符号 Symbol	参数描述 description of parameter	单位 unit
U	电压 voltage	V
I	电流 current	A
R	阻抗 resistance	Ω
$\bar{z}$	电抗 complex impedance	Ω
ρ	电阻值 resistivity	Ω m
Pv (Pc)	功率损耗 power loss	W
t	时间 Time	s
τ	周期时间 periodic time	s
f	频率 frequency	s^{-1} = Hz
f_{max}	最大应用频率 maximum application frequency	Hz
ω	角频率 ($\omega = 2 \cdot f \cdot \pi$) angular frequency	s^{-1}
T	温度 temperature	℃
TC	居里温度 Curie temperature	℃
T. F. (α_F)	温度因子 temperature factor	10^{-6} K^{-1}
α	导磁率温度因子 temperature coefficient of permeability	K^{-1}
H	磁场强度 magnetic field strength	A m^{-1}
HC	矫顽磁力 coercive field strength	A m^{-1}
B	磁通密度 magnetic flux density	T
B_S	饱和磁通密度 saturation flux density	T
^B	峰值磁通密度 peak flux density	T
φ	磁通量 magnetic flux	T m^2
J	磁化强度 magnetic polarization	T
η_B	磁滞常数 hysteresis material constant	10^{-6} mT^{-1}

符号 Symbol	参数描述 description of parameter	单位 unit
L	电感值 inductance	H
L_0	线圈电感 inductance of a coil	H
μ_0	真空导磁率 magnetic constant	$=4*\pi*10^{-7}$ H m^{-1}
μ	绝对导磁率 absolute permeability	V s A^{-1} m^{-1}
μ_r	相对导磁率 relative permeability	-
μ_a	振幅导磁率 amplitude permeability	-
μ_Δ	增量导磁率 incremental permeability	-
μ_i	初始导磁率 initial permeability	-
$\bar{u}$	复数导磁率 complex permeability	-
μ'	实数导磁率 real part of complex permeability	-
μ''	虚数导磁率 imaginary part of complex permeability	-
μ_w , μ_{app}	表现导磁率 apparent permeability	-
μ_e	有效导磁率 effective permeability	-
Q	品质因子 quality factor	-
tanδ	损耗因子 loss factor	-
tanδ / μ_i	相对损耗因子 relative loss factor	-
Ae	有效磁导面积 effective permeability cross area	mm^2
Le	有效磁导路径 Effective permeability length	mm
j	虚数 imaginary unit	√-1
D_F	磁导率减落系数 disaccommodation factor	-
C1/C2	形状因子/磁芯常數 Geometric core constant	mm^{-1} /mm^{-3}

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

專有名詞解釋與定義 EXPLANATION AND DEFINITION OF SPECIALIZED TERMS

Ferrites 铁氧体

Ferrites are crystalline oxides manufactured by ceramic technology. They belong to a class of materials which exhibit the technically useful property of ferromagnetism.

铁氧体是通过陶瓷技术制造的结晶氧化物。它们属于一类具有铁磁性技术上有用的材料。

In metals, ferromagnetism is due to the atomic forces aligning adjacent electron 'spins' in parallel, creating very strong magnetic fields within a body.

在金属中，铁磁性是由于原子力使相邻的电子平行排列"自旋"，从而在物体内产生非常强的磁场。

Ferrites differ from metals in that they are oxides with a 'spinel' crystalline structure.

铁氧体与金属的不同之处在于它们是具有"尖晶石"晶体结构的氧化物。

This contains two magnetically opposing layers and can be represented as successive planes of metallic ions separated by oxygen ions. Interactions between metal and oxygen result in a reduction of electron conductivity compared to a metallic material, giving ferrites their high resistivity and low losses at high frequencies. The opposing spins also result in a lower polarisation than for metals and correspondingly lower saturation flux densities.

它包含两个磁性相对的层，可以表示为由氧离子隔开的金属离子的连续平面。与金属材料相比，金属和氧之间的相互作用导致电子电导率降低，使铁氧体在高频下具有高电阻率和低损耗。与金属相比，相反的自旋也导致更低的极化，并相应地降低饱和通量密度。

Permeability 磁导率

The principal properties of ferrites which determine their technical performance are permeability and its variation in response to external field, to frequency and to temperature.

铁氧体的主要特性决定了其技术性能，是磁导率及其对外部磁场、频率和温度的响应变化。

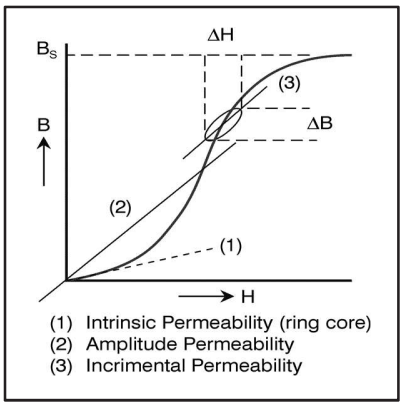
Permeability is defined as the ratio between the magnetic flux density induced in the material and the magnetic force which causes it. A schematic view of this relationship is shown below and has led to several concepts of permeability.

磁导率定义为材料中感应的磁通密度与磁场强度之间的比率。这种关系的示意图如下所示，并导出磁导率的几个概念。

Initial (Intrinsic) Permeability 初始磁导率

Initial permeability is the ratio between flux density ΔB in a closed ring core, and the applied field strength ΔH at very low a.c. fields.

初始磁导率定义为在封闭的环形磁芯中，在非常低的交流电场下，磁通密度 ΔB 与施加的场强 ΔH 之间的比值。



Measurements are generally made at a flux density <0.5mT. Initial permeability is calculated from:

量测初始磁导率时，环形磁芯的磁通密度为 <0.5 mT 初始磁导率的计算公式为：

$$\mu_i = \frac{10^{-6}}{\mu_o} \cdot \frac{L}{n^2} \cdot \sum \frac{l}{A}$$

$\sum \frac{l}{A}$ = Geometric core constant, C_1 (mm^{-1})

n = Number of Turns

L = Inductance (nH)

$$= \frac{1}{0.4\pi} \cdot \frac{L}{n^2} \cdot \sum \frac{l}{A}$$

$$\mu_i = \frac{1}{\mu_o} \cdot \frac{\Delta B}{\Delta H} \quad (\text{Lim.}\ \Delta H \to 0)$$

where μ_o is the magnetic field constant:

其中 μ_o 是磁场常数

$$\mu_o = 4\pi \times 10^{-7} \quad \frac{H}{m} \text{ or } \frac{T}{(A/m)}$$

Goemetric Core Constants 形状因子

For a thin walled toroid, a uniform and magnetic flux density may be assumed. For thick toroids and other components, where the cross-sectional area varies along the flux path, it is necessary to calculate 'effective' magnetic dimensions.
对于薄壁环形线圈，可以假设均匀的磁通密度。对于厚环形线圈和其他形状的产品，其横截面积沿磁通路径变化，因此有必要计算"有效"磁尺寸。

$C_1\left(\sum \frac{l}{A}\right)$ and $C_2\left(\sum \frac{l}{A^2}\right)$

Geometric Core Constant:

$$\sum \frac{l}{A} = C_1 \quad (mm^{-1})$$

Effective Length

$$L_e = \frac{C_1^2}{C_2} = \frac{\left(\sum \frac{l}{A}\right)^2}{\sum \frac{l}{A^2}} \quad (mm)$$

Geometric core constants are calculated from component dimensions according to the IEC - 60205, giving constants:
几何磁芯常数是根据 IEC-60205 计算得出的的常数：

Effective Area

$$A_e = \frac{C_1}{C_2} = \frac{\sum \frac{l}{A}}{\sum \frac{l}{A^2}} \quad (mm^2)$$

Effective Volume

$$V_e = \frac{C_1^3}{C_2^2} = l_e \cdot A_e \quad (mm^3)$$

Effective Permeability 有效磁导率(μ_e)

In most cases ferrite cores contain an air gap, either purposely introduced for a specific magnetic performance or caused by grinding the mating faces.
在大多数情况下，铁氧体磁芯包含气隙，气隙是因为要达成特定的磁性性能而，或是由于产品需要研磨配合面所引起的。

This results in the permeability of the core being lower than the initial permeability of the material. This reduced permeability is calculated from the inductance of a winding on the core and is the effective permeability, μ_e.
气隙会导致磁芯的磁导率低于材料的初始磁导率。有效磁导率是由铁芯上绕组的电感计算出来的，即有效磁导率 μe。

The effective permeability is used in the calculation of losses, temperature coefficient and discommendation.
在计算磁芯相关的损耗、温度、衰落因子皆需使用有效磁导率进行计算。

$$\mu_e = \frac{1}{\mu_o} \cdot \frac{L}{n^2} \cdot \sum \frac{l}{A}$$

Inductance Factor 单圈感值 (A_L)

It is usual to provide information on the expected inductance when winding a specific core. This information is given by the A_L, inductance factor.
单圈感值可以用来计算确认绕线后的感量。

As inductance of a coil is proportional to the square of the number of turns , A_L is the inductance per turn squared.
绕线后的感量与绕线的圈数平方成正比。

$$A_L = \frac{L\,(nH)}{n^2} = \frac{\mu_e}{\sum \frac{l}{A}} \cdot \mu_o$$

A_L values are generally measured using fully wound coil formers. The number of turns required to produce a specific inductance is:
单圈感值通常会使用平均绕满线架后的圈数去进行计算，在已经知道需求感量时可反算所需要的圈数：

$$n = \sqrt{\frac{L}{A_L}}$$

Rod Permeability 棒状产品磁导率 (μ_{rod})

Many ferrite cores, of which aerial rods and screw cores are typical examples, are used in such a manner that the ferrite material only occupies part of the path of the magnetic lines generated by the current flowing in the winding.
在一些铁氧体磁芯中，例如棒状和螺旋磁芯在使用时，整个磁线路径并不完整存在于铁氧体材料中。

The magnetic circuit is then virtually open and very strong demagnetizing fields appear at the end faces of the core.
在这种状况下，称此磁路实际是开放的，此时在磁芯的端面会有非常强的退磁磁场出现。

Depending on the length-to-diameter ratio for cylindrical cores, the permeability (rod permeability) can be calculated from the intitial permeability of the material.
棒状磁导率，是根据材料的初始磁导率以及棒状产品的长径比与绕线方法，进行计算。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

Because of the nature of the magnetic circuit, rod permeability is always much lower than the initial permeability of the material, and the difference between these permeabilities increases as the length-to-diameter ration decreases.
由于磁路的性质，磁棒的磁导率总是比材料的初始磁导率低得多，并且这些磁导率之间的差异随着长径比的减小而增大。

Amplitude Permeability 增幅磁导率（μ_a）

When a high alternating magnetic field is applied, as in power transformers, the curve of the B vs. H path causes the permeability to change during the cycle.
当施加高交变磁场时，如在电源变压器中，B / H 的非线性变化，导致磁导率在交流周期内发生变化。
The definition of permeability which is of greater use to the designer is the amplitude permeability, generally at specific flux densities and temperatures.
振幅渗透率 μ_a，在特定的磁通密度和温度下，对设计人员更有参考价值。

$$\mu_a = \frac{1}{\mu_o} \cdot \frac{\hat{B}}{\hat{H}}$$

where B is the peak flux density in Tesla (sinusoidal induction) and H is the peak field strength in A/m.
B 为峰值磁通密度，单位为特斯拉(正弦感应)，H 为峰值磁场强度，单位为 A/m。
In the case of measurements carried out on the winding of a gapped core the result is an 'effective' amplitude permeability in which the amplitude permeability of an equivalent toroid is reduced by the reluctance of the air gap.
在对有气隙铁芯绕组进行测量的情况下，称为“有效”的振幅磁导率，相对于等效环形的振幅磁导率时，因为气隙产生的磁阻会降低振幅磁导率。
For ferrites used in power applications, information generally includes the bottom limit of the amplitude permeability, at 25°C and 100°C.
对于在电源应用上的铁氧体材料通常会标注 25°C 以及 100°C 的 μ_a 最小值。

Incremental Permeability 增量导磁率 (μ_Δ)

Where a D.C. current is applied to a winding, producing a biasing field (H_B), the operating point of a small A.C. excitation is moved to a higher point on the B-H curve.
当直流电流作用在线圈上时，会产生一个偏置的磁场强度(H_B)，在此偏置的磁场强度下作用一个小的交流激励电源会将 B-H 曲线的中心点偏移。
The amplitude permeability of the A.C. excursion is termed the incremental permeability.
在这个时后的振幅导磁率称为增量导磁率。

$$\mu_\Delta = \frac{1}{\mu_o}\left[\frac{\Delta B}{\Delta H}\right]_{H_B} \quad (\text{Lim.}\,\Delta H \to 0)$$

Saturation Flux Density 饱和磁通密度 (Bsat)

Saturation flux density (Bs) as that value obtained for a specific field strength based on IEC 60401-3.
饱和磁通密度是根据 IEC60401-3 相关要求下的磁场强度所测量。

初始磁导率 Initial permeability	量测频率 Frequency KHz	磁场强度 Field strength A/m
$u_i > 1000$	≤10	1200
$1000 \geqq u_i > 500$		3000
$500 \geqq u_i > 100$		10000
$100 \geqq u_i$		20000

Losses(General) 广义上的损耗

Losses associated with a coil wound on a ferrite core can be represented by the resistive component of its impedance at any frequency and any field strength.
线圈绕在铁氧体铁芯上的损耗可以用它在任何频率和场强下的阻抗的电阻分量来表示。

$$Z = R_{wind} + R_h + R_r + R_e + j\omega L$$

R_{wind} is the winding resistance loss 绕线电阻损耗
Rh is the hysteresis loss of the core 磁芯磁滞损
Rr is the residual loss of the core 磁芯残余损
Re is the eddy current loss of the core 磁芯涡流损
$j\omega L$ is the inductive reactance of the core 磁芯感应电抗

Impedance 电抗 (Z)

The ratio of r.m.s. voltage over r.m.s. current in a circuit with sinusoidal excitation is defined as the impedance and is expressed in Ohms.
在正弦激励的电路中，均方根电压与均方根电流之比定义为阻抗，并以欧姆表示。
Φ is the angle by which voltage leads the current. Hence,

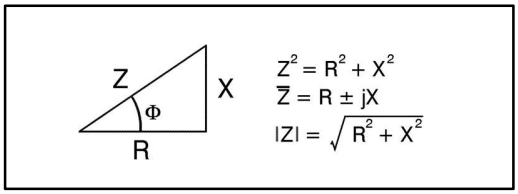
Φ是电压领先电流的角度(相位)。因此，
Resistance 阻抗， R = ZCosΦ(ohms)
and Reactance, 感抗 X = ZSinΦ (ohms)
This can be represented in the impedance triangle,

$$R_s = \omega L_0 \mu''_s$$

$$\omega L_s = \omega L_0 \mu'_s$$

$$\mu = \mu' - j\mu''$$

相关表达如下图，



For suppression applications it is advantageous to maximize the resistive component at the interfering frequency.
对于抑制应用，最大化干扰频率处的电抗是有利的。

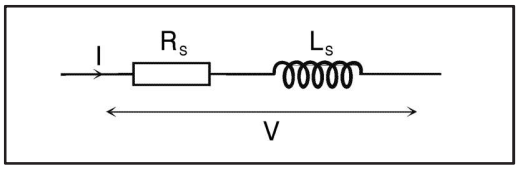
Complex Permeability 复数磁导率(μ)

The complex permeability (μ) expands the permeability concept using complex notation to include both an inductive component (real, inductive permeability, μ') and the loss component (imaginary, resistive permeability, μ").
复数磁导率(μ)用复数表示磁导率的概念，使其既包括感应分量(实数部份的感应磁导率μ')，也包括损耗分量(虚数部份的电阻磁导率μ")。

The impedance (Z) of a loss-free winding would be expressed as:
当不计算线圈损耗时，电抗可表示为：

$$Z = j\omega\mu L_0$$

where L_0 is the inductance of a winding on a core with unit permeability.
L_0是单位电感量，采用真空导磁率计算。
For a wound ferrite component the impedance can be represented by an inductive reactance in combination with a loss resistance.
对于绕线后的铁芯，感抗可以结合损耗电阻表示。
For series representation:
串联时,
Hence: 因此:
The inclusion of the resistive loss results in a reduction of the phase angle between voltage and current from 90° by an angle δ, the loss angle.

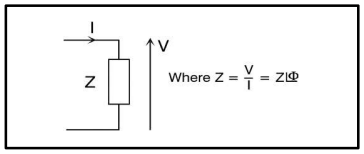


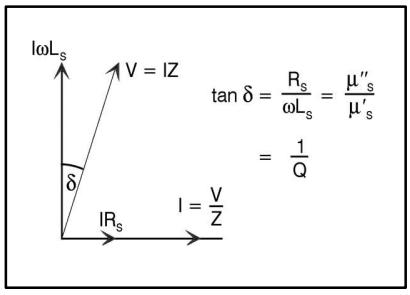
$$\frac{V}{I} = Z = R_s + j\omega L_s$$

$$= j\omega\mu L_0 = j\omega L_0 (\mu' - j\mu''_s)$$

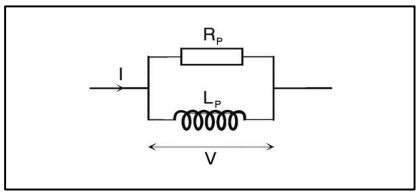
电阻损耗的加入使得电压和电流之间的相位角从 90°减小一个δ角，即损耗角。

Q is the quality factor. Curves of real and imaginary components of complex permeability (series representation) as a function of frequency are given in the material data pages. As measurements are made at low field strength (<0.2mT) the real component corresponds to the initial permeability of the material.
Q 是品质因子。在低磁场强度(<0.2mT)下，量测复数磁导率的实部和虚部(串联状况)随频率变化的曲线。实数分量对应于材料的初始磁导率。





For parallel representation:
并联模式:



$$\frac{1}{z} = \frac{1}{R_p} + \frac{1}{j\omega L_p} = \frac{1}{j\omega L_0}\left(\frac{1}{\mu'_p} - \frac{1}{j\mu''_p}\right)$$

giving:

$$Q = \frac{\omega L}{R}$$

The conversion between series and parallel mode measurement is:

串联与并联的转换如下：

$$R_s = R_p/(1 = Q^2) = R_p/(1+1/\tan^2\delta)$$

$$L_s = L_p/(1+1/Q^2) = L_p/(1+\tan^2\delta)$$

and

$$Q = \frac{1}{\tan\delta} = \frac{1}{\mu_i . \text{Loss Factor}}$$

It is common practice to give curves of complex permeability in the series form.

通常而言，会采用串联模式下的状况去量测表达复数磁导率。

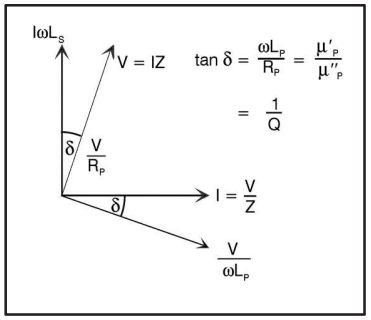
$$\mu'_p = \mu'_s(1+\tan^2\delta)$$

$$\mu''_p = \mu''_s(1+1/\tan^2\delta)$$

However, it should be noted that the series change in real permeability can be misleading, with graphs showing permeability falling off rapidly at high frequencies;

$$R_p = \omega L_o \mu''_p,$$

$$\omega L_p = \omega L_o \mu'_p$$



this is only a mathematical representation and at this point parallel permeability should be used.

然而，应该注意的是，实数磁导率在串联量测模式下，在高频率会快速衰减，如果要计算这个点下的实数磁导率，在数学表示上，应该使用并联模式计算。

Although series representation befits suppression and wide band applications, it is physically more correct to consider the parallel form and conversion to this is preferable in transformer applications where a more useful expression of in- phase and out-of-phase current can be gained.

虽然串联表示法适合于抑制和宽频带应用，但在物理上考虑并联形式在变压器应用，使用并联模式可能是更可适合的，因为可以得到更好的同相和失相电流表达式。

Q 品质因子(Quality Factor)

The quality of an inductor in a resonant circuit is commonly described by the Q factor, the ratio of reactance and resistance at a given frequency,

谐振电路中电感的质量通常用 Q 因子来描述，Q 因子是在给定频率下电抗和电阻的比值，

As the Q of capacitors is high, the Q of a resonant circuit, which is the ratio between the center frequency and the spacing between ±3dB points on the resonance curve, is determined by the Q of the inductor.

由于电容的 Q 值很高，因此在谐振电路的 Q 值，即中心频率与谐振曲线上±3dB 点之间的间距之比，由电感的 Q 值决定。

In open-circuit cores, the true Q value is dependent on the properties of the ferrite material and shape and size of the core.

在开路磁芯中，真实的 Q 值取决于铁氧体材料的性质以及磁芯的形状和尺寸。

It can only be found by measuring the Q value of the winding, both with and without the core and calculating the a.c. resistance of the winding. Therefore,

它只能通过测量有无铁芯时的绕组线圈 Q 值，去计算绕组的交流电阻来找到。因此，

$$R_{total} = R_{ferrite} + R_{wind}$$

$$= \frac{\omega L}{Q_{total}}$$

$$R_{wind} = \frac{\omega L}{\mu_{coil} . Q_{wind}}$$

where L is the inductance of the coil with the core.

此处的 L 为绕线后的磁芯感值.

as the inductance of the winding without the core is reduced by a factor of coil (the ratio of inductance of coil with core to inductance of coil without core).

由于无铁心线圈的电感是线圈的一个因数(有铁心线圈的电感与无铁心线圈的电感之比)。

The direct comparison of the values of Q is only possible when all conditions of measurement are held constant.

要直接比对 Q 值只有在所有量测状况都相同下，此比对才有意义。

Losses at low magnetizing field strength 低磁场强度下的损耗

For individual grades of ferrite information on losses at low field strengths is given by the loss factors normalized to unit initial permeability.

对于不同等级的铁氧体，低磁场强度下的损耗信息由归一化(正常化)到单位初始磁导率的损耗因子。

It is understood that the loss coefficients are always proportional to the effective permeability of such cores.

损耗因子的数值总是与磁芯的有效磁导率成比例关系。

Loss Factor (residual and eddy current) 损耗因子(残余损和涡流损)

Residual and eddy current losses are measured together at a flux density of <0.5mT for ring cores, and <1mT for components with a sheared flux path.

对于环形铁芯，在磁通密度<0.5mT 时，剩余和涡流损耗一起测量，对于磁通路径剪切的部件，磁通密度<1mT。

For a gapped core with an effective permeability μ_e, the residual & eddy current loss coefficient is:

对于有气隙的铁芯，其残余与涡流损耗系数定义为:

$$L.F. = \frac{R_{(r+e)}}{\omega L} \cdot \frac{1}{\mu_i} = \frac{\tan \delta_{(r+e)}}{\mu_i} = \frac{1}{\mu_i . Q_{(r+e)}}$$

i.e. it is reduced by a factor of μ_e/μ_i Similarly the $Q_{(r+e)}$is increased by a factor of μ_i/μ_e

此系数减少了 μ_e/μ_i的因子，相似的状况下 $Q_{(r+e)}$是增加了一个因子 μ_i/μ_e。

Hysteresis Loss (Low magnetizing field strengths) 低磁场强度下的磁滞损

Hysteresis loss must be normalized not only with respect to unit initial permeability, but also with respect to unit flux density.

磁滞损不仅要按单位初始磁导率进行归一化，而且要按单位通量密度归一化。

Hysteresis material constant (η_B)(IEC Publication 125, 128).

磁滞系数的定义如下

$$\eta_B = \frac{\tan \delta_h}{\mu i . \hat{B}} \quad (mT \times 10^{-6})$$

where $\tan \delta_h = R_h/\omega L$ and B is the peak flux density. This definition is quoted in the material data pages where measurement of Rs and Ls are made on an impedance analyzer at two peak flux densities of 1.5 and 3.0mT.

式中 $\tan \delta_h = R_h/\omega L$, B 为峰值通量密度。该定义在材料数据页中引用，在阻抗分析仪上测量了 1.5 mt 和 3.0mT 两个峰值通量密度下的 Rs 和 Ls。

Where a sheared or gapped core is involved, the hysteresis loss is reduced by a factor μ_e/μ, and $\tan \delta_h = \eta_B \mu_e B$

当涉及到有气隙时，磁滞损耗需减去 μ_e/μ，则 δ_h变成 $\tan \delta_h = \eta_B \mu_e B$

Losses at high magnetizing field strengths. Power Loss Density 在高磁场强度下的损耗，功率能量损耗密度(Pv)

The previous hysteresis loss factors can only be applied when the flux density in the core is relatively low (up to say, 20mT).

之前的磁滞损耗因子仅适用于磁芯中的磁通密度相对较低的情况(最高可达 20mT)。

When the flux density is high, as in power applications, the losses are specified as the power loss density (PV) (i.e. total power losses per unit volume of the core) at a given frequency and flux density.

当磁通密度较高时，如在功率应用中，损耗被指定为在给定频率和磁通密度下的功率损耗密度(P_V)(即铁芯单位体积的总功率损耗)。

The power loss density may be empirically expressed as a function of frequency and flux density by the relation (Steinmetz Model):

根据经验，可以将功率损耗密度表示为频率和磁通密度的函数(斯坦梅茨模型):

$$P_v = k.f^a.B^b \quad mW/cm^3$$

where constant

'a' has values between 1.2 & 1.8 constant

'b' has values between 2.2 & 2.6.

'k' is a constant dependent upon temperature.

其中常量` a `的值在 1.2 ~ 1.8 之间。常量` b `的值在 2.2 ~ 2.6 之间。k 是一个依赖于温度的常数。

Power losses are expressed in the material data for power ferrites in mW/cm^3. In component data it is more commonly expressed in total power loss (Watts) at specific flux densities, frequencies and temperatures, assuming sinusoidal induction.

功率损耗用功率铁氧体的材料数据表示单位为mW/cm3。在元件数据中，它通常表示为正弦感应下的特定通量密度、频率和温度下的总功率损耗(瓦)。

Frequency Range 可用频率范围

The range of frequencies in which a grade of ferrite material may be used depends upon the conditions of the application and on the Configuration of the core.

铁氧体材料可以使用的频率范围取决于应用的条件和铁芯的结构。

The upper limit of the range is based on the rapid rise of loss factor at and above a certain frequency. This point is easily measured for any given core.

该范围的上限是根据损耗因子在某一频率及高于该频率时的快速上升。对于任何给定的铁芯来说，这一点都很容易测量。

If the core is to be used in a transformer, the circumstances are different. It is not only the loss in the core and winding that is significant but the relationship between the shunt reactance of the transformer winding and the impedance of the source or load circuit is also of fundamental importance. Leakage inductance also determines the losses in the transformer at the high frequency end of its working range.

如果铁芯用于变压器，情况则不同。不仅铁芯和绕组的损耗是重要的，而且变压器绕组的并联电抗与源或负载电路的阻抗之间的关系也是至关重要的。同时漏感还决定了变压器在其工作范围的高频端处的损耗。

It must be clearly stated that manufacturers test their products at frequencies specified in their tabulated publications and the behavior of ferrite material outside these frequencies cannot be guaranteed.

必须明确指出，制造商在其表格出版物中规定的频率测试他们的产品，铁氧体材料的行为不能保证在这些频率之外的材料特性表现。

Temperature Factor and Temperature Coefficient 温度因子/温度系数

Temperature coefficient is the proportional inductance rise per ℃.

温度系数为电感量与温度的比例关系。

$$T.C. = \frac{\Delta L}{L\Delta T} = \frac{\Delta \mu}{\mu \Delta T}$$

Where ΔT is the temperature rise (℃) causing the change ΔL in inductance (or Δμ permeability).

式中ΔT为引起电感ΔL(或 Δμ 磁导率)变化的温升(℃)

Temperature Factor is normalized to the unit permeability and is expressed in ppm/℃ and given for a specified temperature range (ex. 25℃ to 55℃).

温度因子定义为归一化后的单位磁导率，以 ppm/℃ 表示，并在指定温度范围(例如 25℃ 至 55℃)下给出。

When an air gap is inserted into a magnetic circuit so that the permeability is reduced to the effective value, μ_e, the effect of permeability variations are reduced in the ratio μ_e/μ_i. It is then convenient to divide the temperature coefficient by μ_i so that the temperature coefficient of effective permeability at gapped condition can be obtained by simply multiplying the new factor by μ_e. The new factor designated as temperature factor of reluctivity by IEC Technical Committee has the symbol α_F:

当在磁路中插入气隙使磁导率降低到有效值 μ_e 时，μ_e/μ_i 的比值会降低磁导率温度的变化。较为适宜的方式是将温度系数除以 μ_i，再乘以 μ_e 即可得到此状态下的有效磁导率的温度系数。IEC 技术委员定义此新系数为温度磁阻系数，其符号为αF:

$$\alpha_F = \frac{\Delta \mu_i}{\mu_i^2 \cdot \Delta T} \text{ or } \frac{\Delta \mu}{\mu_1 \mu_2 \cdot \Delta T}$$

In open-circuit core Configurations the temperature coefficient can only be ascertained by direct measurement in each specific case.

在开放磁路的铁芯结构中，温度系数只能通过直接测量来确定。

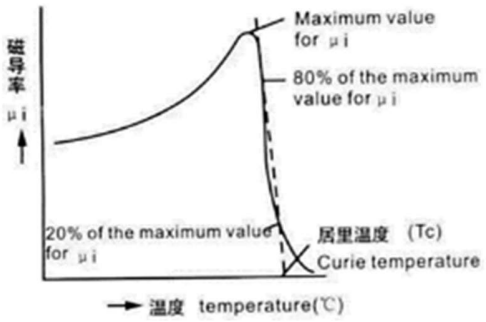
Curie Temperature 居里温度 (TC)

The **Curie temperature** is the temperature above which the disruption of magnetic ordering by increasing thermal motion causes the material to lose its ferromagnetic character, and the permeability falls to near unity. This is a reversible effect and lowering the temperature below the Curie Point restores the permeability.

居里温度是指在此温度以上，由于热运动的增加，磁有序的破坏会使材料失去铁磁特性，磁导率下降到接近于零。这是一个可逆的效应，将温度降低到居里点以下可以恢复磁导率。

The Curie temperature is defined as the temperature at which the intersection of the straight lines drawn at 80% and 20% of the maximum permeability converges to a point where the permeability approaches unity (μi ≈ 1).

居里温度的定义为最高磁导率的 80%及 20%的点做直线交汇于 u_i 接近于 1 时的温度点。



Disaccommodation Factor 磁导率减落系数

After a ferrite core has been subjected to a shock (thermal, mechanical or magnetic) its permeability abruptly increases and immediately begins drifting downwards. This continues for a very long period. The decrease in permeability is linear when plotted on a logarithmic scale,
铁氧体磁芯受到冲击(热冲击、机械冲击或磁冲击)后，其磁导率突然增加，并立即开始向下漂移。这种情况会持续很长一段时间。在对数尺度上，磁导率的下降呈线性变化，
This form of instability is termed disaccommodation.
这种形式的不稳定被称为磁导率减落。

$$DF = \frac{\mu_2 - \mu_1}{\mu_1 . \log_{10} t_2/t_1}$$

where μ_1 is the permeability at the time t_1, and μ_2 is the permeability at the time t_2. The relative inductance drop in the period 1 to 10 hours after the shock is the same as the in the period 1 to 10 years, so that the long-term instability of the inductance can be predicted.
其中，μ_1 是时刻 t_1 的渗透率，μ_2 是时刻 t_2 的渗透率。冲击后 1 ~ 10 小时的相对电感下降与冲击后 1 ~ 10 年的相对电感下降相同，从而可以预测电感的长期不稳定性。
In the case of a core with a closed magnetic path, but containing a gap the μ_e is used.
i.e. Disaccommodation = D.F. x μ_e
i.e. the coefficient is reduced by a factor μ_e/μ_i
在磁芯闭合磁路且有气隙的情况下，使用 μe。
即磁导率衰落= D.F. x μe

The relationship in the case of open circuit cores is not so simple and it is generally not possible to predict the actual value of their disaccommodation coefficients.
在开路的情况下，关系就不那么简单了，通常不可能预测它们的减落系数的实际值。
Specified disaccommodation measurements at 25℃ or 40℃. (IEC62044-2)
减落系数的测量温度根据 IEC62044-2 为 25℃ 或 40℃。

Resistivity 电阻率

Ferrites are semi-conducting materials and their resistivity varies with the grade of ferrite.
铁氧体是半导体材料，其电阻率随铁氧体组成成份的不同而变化
For nickel-zinc ferrites, the resistivity is of the order of 10^5 to 10^7 ohm-cm. For manganese-zinc ferrites, it is appreciably lower, say 10 to 10^3 ohm-cm, but remaining very much higher than the resistivity of metals and metallic alloys.
镍锌铁氧体的电阻率为 10^5 至 10^7 欧姆-厘米。锰锌铁氧体的电阻率略低，约 10 至 10^3 欧姆-厘米，但仍然远远高于金属或金属合金的电阻率。

Dielectric Constant 介电常数

Manganese-zinc ferrites have high values of dielectric constant which in some cases may approach 10^6 at a frequency of 1kHz. The value of the dielectric constant drops with the frequency, not very rapidly at first but then more and more steeply until at very high frequencies it approaches a value of 10.
锰锌铁氧体具有很高的介电常数，在某些情况下在频率为 1kHz 时可接近 10^6。介电常数的值随着频率的变化而下降，起初不是很快，然后越来越快，直到非常高的频率时，它接近于 10。
Because of the high dielectric constant of some cores (particularly when they are made from Manganese Zinc) it is important to insulate the winding from the core with a layer of tape. In this way, losses due to increased self-capacitance will be reduced.
由于某些铁芯(特别是由锰锌制成的铁芯)的介电常数高，用一层胶带将绕组与铁芯绝缘是以减少寄生电容所造成的损耗。

Physical Parameters 物理参数

Exact values of the physical parameters of ferrite components cannot be given as those obtained will depend both upon the type of material used and the conditions under which it is manufactured. However, the table below indicates the order of magnitude of these values:

铁氧体元件的物理参数精确值受限于不能给出所用材料的类型和制造条件，无法精准的给定一个数值。但是，可以列出下表这些值的数量级:

Tensile Strength:	20 N/mm^2
Compressive Strength:	100 N/mm^2
Hardness:	10000 N/mm^2 (Vickers HV_{15})
Linear Expansion Coefficient:	10×10^{-6}/°C (Room Temperature)
Youngs Modulus:	1.5×10^5 N/mm^2
Thermal Conductivity:	4×10^{-3} J/mm sec °C
Density:	4 to 5 g/cm^3

应用范围 SCOPE OF APPLICATION

锰锌铁氧体是一种软磁铁氧体，其尖晶石结构为其特征。通过陶瓷工艺制成，其成分包括铁、锰和锌的氧化物及其盐类。该材料具有出色的起始导磁率，在 1 千赫至 10 兆赫的频率范围内表现出色。因此，它被广泛应用于各种电子和电气设备中。

Manganese zinc ferrite is a type of soft magnetic ferrite characterized by its spinel structure. Crafted through ceramic technology, its composition includes oxides and salts of iron, manganese, and zinc. The material exhibits excellent initial permeability, performing admirably within the frequency range of 1 kHz to 10 MHz. Consequently, it finds extensive application across various electronic and electrical devices.

在电子领域，锰锌铁氧体可用于制造电感器、变压器、滤波器的磁芯、磁头和天线棒。这些铁氧体磁芯具有良好的磁导性能，可有效地转换和传输电磁信号，使其成为通信设备、射频设备和无线电设备的关键部件。

In the realm of electronics, manganese zinc ferrite is utilized for manufacturing magnetic cores for inductors, transformers, filters, magnetic heads, and antenna rods. These ferrite cores boast superior magnetic conductivity, effectively converting and transmitting electromagnetic signals, rendering them critical components in communication, radio frequency, and wireless devices.

在电力领域，锰锌铁氧体被广泛应用于开关电源用功率磁芯。这些磁芯主要用于各种 AC-AC、DC-DC、AC-DC、DC-AC 隔离变压器，以及程控交换机中的话频变压器、电流互感器、低功率驱动变压器和输入/输出滤波器等设备。它们具有高效的能量转换性能和良好的电磁屏蔽特性，在提供稳定、可靠电源的同时，降低了电磁干扰的风险。

In the field of power electronics, manganese zinc ferrite is widely employed as power magnetic cores for switch-mode power supplies. These cores are primarily utilized in a range of devices including AC-AC, DC-DC, AC-DC, and DC-AC isolation transformers, as well as telecommunication frequency transformers in program-controlled switches, current transformers, low-power drive transformers, and input/output filters. They offer efficient energy conversion performance and excellent electromagnetic shielding characteristics, mitigating electromagnetic interference risks while providing stable and reliable power sources.

此外，锰锌铁氧体在医疗设备、汽车行业、消费电子、可再生能源、工业应用以及研究与开发等领域也有着广泛的应用。它被用于制造 MRI 设备中的磁芯、汽车发动机中的点火系统磁芯、消费电子设备中的电源磁芯、可再生能源系统中的逆变器和变换器磁芯，以及工业传感器、执行器和电磁兼容解决方案中的磁芯等。

Furthermore, manganese zinc ferrite is widely applied in various fields including medical devices, automotive industry, consumer electronics, renewable energy, industrial applications, and research and development. It is used to manufacture magnetic cores for MRI devices, ignition system cores in automotive engines, power supply cores in consumer electronic devices, inverter and converter cores in renewable energy systems, as well as cores for industrial sensors, actuators, and electromagnetic compatibility solutions.

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

锰锌功率材料(MN-ZN POWER MATERIALS)

Main Application Area 主要应用范围	Frequency Range (MHz)	Material 材料名	μ_i @25℃	Bs(mT) @25℃	Bs(mT) @100℃	Pcv(kW/m³) @25℃	Pcv(kW/m³) @100℃	Key Feature 材料主要特征
Low-Medium Frequency Line out transformers Power Transformers Power Inductors Choke Inductors 低中段頻率应用 LOT、功率变压器、功率、扼流电感等应用	≦ 0.3	TP40	2000	480	390	720[1]	480[1]	Low-Loss Power Materials 低损耗功率材料
	≦ 0.4	TP44	2000	500	400	600[1]	330[1]	
	≦ 0.4	TP45	2500	500	400	600[1]	400[1]	
	≦ 0.5	TM80	3000	520	420	350[1]	330[1]	Wide-temp, High-Bs, Low-Loss Power Materials 宽温,高磁通密度,低损耗功率材料
	≦ 0.5	TM81	3000	520	420	260[2]	310[2]	
Medium-High Frequency Power Transformers Power Inductors 中高段頻率用的功率变压器、功率电感等应用	≦ 0.8	TM50A	2500	550	450	800[3]	700[3]	High-Freq, Wide-temp, High-Bs, Low- Loss Power Materials 高频,宽温,高磁通密度,低损耗功率材料
	≦ 3	TM61	1000	540	440	190[4]	155[4]	
	≦ 5	TM63	700	540	450	70[4]	80[4]	
Pulse Transformer Power Inductors Choke Inductors 脉冲变压器 功率、扼流电感等应用	≦ 0.5	TM71	3800	550	425	400[1]	1100[1]	High-Perm., High-Bs, Power Materials 高导磁率,高饱和磁通密度功率材料
PFC Choke Choke Induct 功率校正电感 扼流电感等应用	≦ 0.2	TM82	1200	600	500	200[5]	330[5]	High-Bs Power Materials 高饱和磁通密度功率材料
Low Frequency Power Transformers Power Inductors Choke Inductors 低频率段 功率、扼流电感器	≦ 0.1	T2	2800	510	390	200[5]	330[5]	Low-Freq, High-Bs Low-Loss Power Materials 低频率段高饱和低损耗功率材料
	≦ 0.1	T2M	2000	510	410	270[5]	330[5]	
Electrical Ballast Choke Inductors Balun transformers 镇流器 扼流电感 巴伦变压器	≦ 0.1	TB2	1500	580	460	310[5]	430[5]	High rectangle ratio material 高矩形比材料

备注(Notes):

Toroid Core:T25*15*8

TM61/TM63:T12.5*7.5*7

T2/T2M/TB2:T31*19*13

Bs Test Condition: H:1200A/m Freq:100Hz

Power Loss test Condition:

①100KHz/200mT/②300KHz/100mT/③500KHz/100mT/④1MHz/50mT/⑤25KHz/200mT

PERFORMANCE FACTOR OF POWER MATERIAL(功率材料性能因子)

Performance Factor For material selection based on frequency, one recent trend has been to plot curves of “performance factor” (B x f) versus frequency at some defined core loss density.

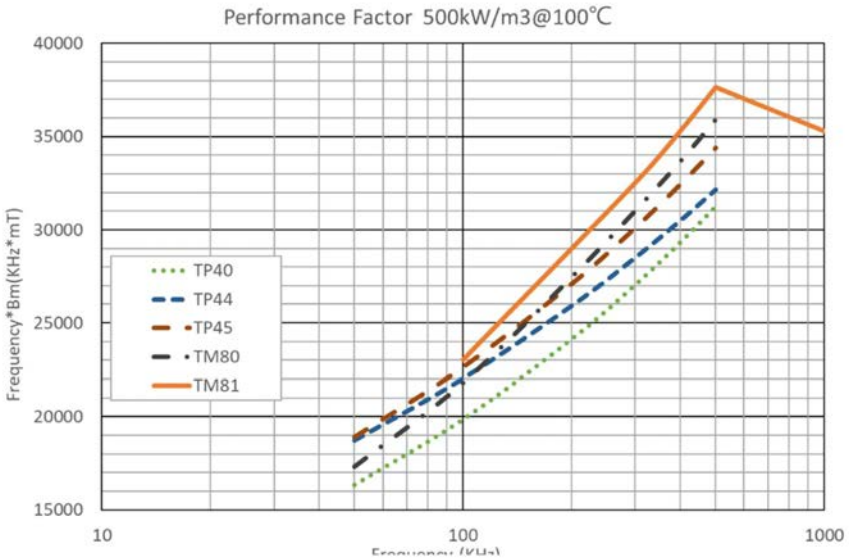
The performance factor is a measure of material utility derived by multiplying the operating frequency by the corresponding flux density level that would yield the predefined core loss value,

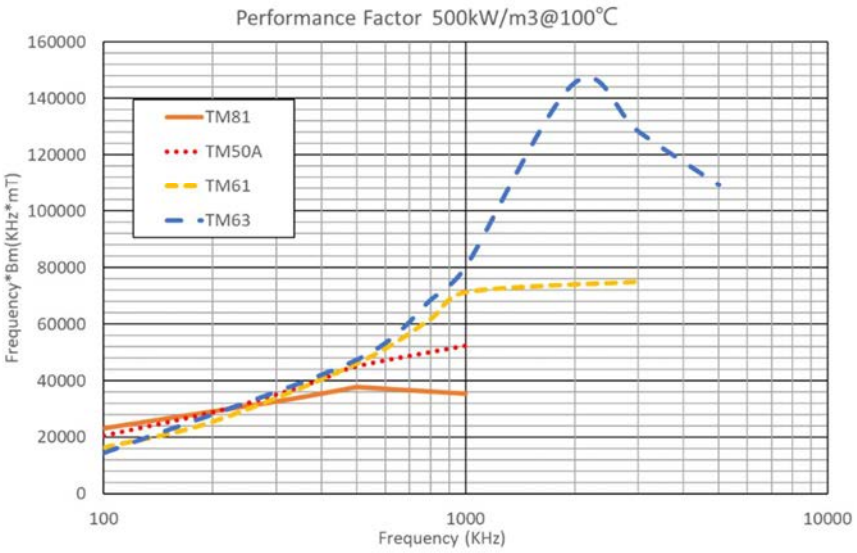
基于频率的材料选择，有一种方式是定义一个核心损耗密度下绘制“性能因子”(B x f)与频率的曲线。性能因子是材料损耗密度的一种度量方式，通过将工作频率乘以产生预定铁芯损耗值的相应通量密度水平得到，

where:

B = Flux Density (mT)

f = Operating Frequency (KHz)





By observation of these curves, it appears that an optimum material can be selected for a particular operating frequency. However, this comparison method only yields a relative figure of merit for the chosen material, and the design engineer must perform further analysis to determine a usable value of flux density for a given frequency and core loss density level that will limit the temperature rise value to acceptable levels.

通过观察这些曲线，可以看出对于特定的工作频率，可以选择一种最佳的材料。然而，这种比较方法只能得出所选材料的相对优值，设计工程师必须进行进一步分析，以确定给定频率和铁芯损耗密度水平下的可用磁通密度值，从而将温升值限制在可接受的水平

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

锰锌高导磁率材料(MN-ZN HIGH PERM. MATERIALS)

高导磁率的锰锌铁氧体是软磁铁氧体中的重要代表，具有出色的磁性能和广泛的应用前景。通常情况下，当其初始磁导率（μ_i）超过 5000 时，即被视为高导磁率铁氧体。这种铁氧体的主要特点在于其极高的磁导率，通常达到甚至超过 15000。高导磁率使得这种铁氧体材料在电磁应用中具有独特的优势。

High permeability manganese zinc ferrite serves as a significant representative within the realm of soft magnetic ferrites, boasting excellent magnetic properties and broad application prospects. Typically, when its initial permeability (μi) exceeds 5000, it is regarded as high permeability ferrite. The key characteristic of this ferrite lies in its remarkably high permeability, often reaching or even exceeding 15,000. This high permeability grants the material distinct advantages in electromagnetic applications.

高导磁率的锰锌铁氧体在电子行业中有着广泛的应用。它们常常被用于制造通信设备、测控仪器和家用电器等各种电子产品。尤其值得一提的是，在宽频带变压器、微型低频变压器、小型环行脉冲变压器和微型电感元件等方面，高导磁率铁氧体发挥着关键的作用。

In the electronics industry, high permeability manganese zinc ferrite finds extensive use. It is commonly employed in the manufacturing of various electronic products, including communication devices, measuring instruments, and household appliances. Particularly noteworthy is its critical role in wideband transformers, miniature low-frequency transformers, small loop pulse transformers, and micro-inductor components. Overall, high permeability manganese zinc ferrite stands out as a pivotal material in the electronics industry, offering exceptional magnetic properties and promising applications across a wide spectrum of electronic devices and systems.

Main Application Area 主要应用范围	Material 材料名	Suppression Frequency Range (MHz)	Inductive Frequency Range (MHz)	μ_i @25℃	Bs(mT) @25℃	Tc(℃)	Loss Factor	Hysteresis material constant (η_B)
EMI suppression Antenna EMI 应用 天线传感	E02	≦ 500	≦ 1.5	2000	370	>130	<30	2.0
Wideband signal transformers Pulse transformer EMI suppression 宽频讯号变压器 脉冲变压器 EMI 应用	T05	≦ 20	≦ 0.5	5000	450	>150	<6	0.3
	T07	≦ 10	≦ 0.3	7000	420	>140	<12	0.2
	T10	≦ 5	≦ 0.2	10000	420	>140	<15	0.4
	T12	≦ 2	≦ 0.2	12000	400	>110	<15	0.5

备注(Notes):
Toroid Core:T25*15*8
Bs Test Condition: H:1200A/M Freq:100Hz

标准化阻抗 NORMALIZED IMPEDANCE

"Normalized Impedance" refers to the process of dividing the impedance value by a reference value to eliminate the effects of size, material, or other factors, making it more accurate to compare impedance across different systems or devices. When comparing the impedance of ferrite materials, the following formula is used for normalization.

"Normalized Impedance"（标准化阻抗）是指将阻抗值除以某个基准值以消除尺寸、材料或其他因素的影响，使得不同系统或者设备之间的阻抗比较更为准确。在铁氧体材料的阻抗比对时，采用以下的公式进行标准化。

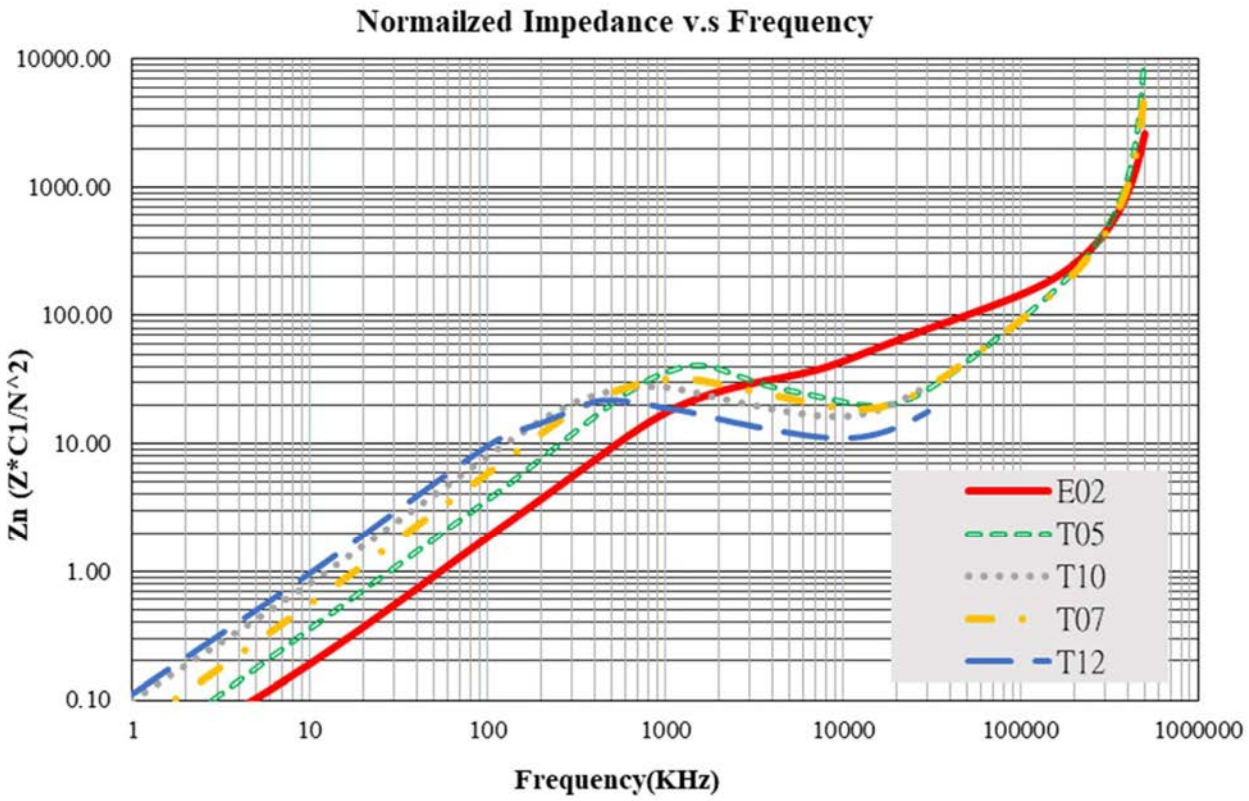
$$Zn = Z \times \frac{le}{Ae} \times \frac{1}{N^2}$$

Where le is the effective magnetic path length, Ae is the effective magnetic cross-sectional area, and N is the number of turns of the coil.

其中 le 为有效磁路径、Ae 为有效磁通面积、N 为绕线圈数。

The measurement of impedance is related to the voltage used as well as the diameter and length of the copper wire. In this catalog, unless otherwise specified, the voltage used for Zn is 500mV, and the wire used is a single-core copper wire with a diameter of 0.5mm and a length of 160mm.

阻抗的量测与所使用的电压以及铜线线径与长度相关，本目录中的 Zn 如果没有另外说明，则所使用的电压为 500mV，线径为 0.5mm/长度 160mm 的单芯铜线。



如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

功率铁氧体材料列表 POWER FERRITE MATERIALS LIST

特性 Characteristics	測試條件/單位 Test condition /Unit	溫度 Temp	TP40	TP44	TP45	TM80	TM81	TM50A	TM61	TM63
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT	25℃	2000 ±25%	2000 ±25%	2500 ±25%	3000± 25%	3000 ±25%	2500 ±25%	1000 ±25%	700 ±25%
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	>3000	>3000	>4000	>4000	>4000	>3500	>2200	>1400
	25KHZ/320mT	100℃	>3200	>2700	>3500	>4000	>3400	>3500	>2000	>1200
飽和磁通密度 Bs Sturation Flux Density	1200A/M mT	25℃ 100℃	480 390	500 400	500 400	520 420	520 420	550 460	540 440	540 450
殘留磁通密度 Br Remanence	1200A/M mT	25℃ 100℃	150 60	150 80	130 70	80 60	70 50	90 70	90 50	100 90
矯頑力 Hc Coercivity	1200A/M A/M	25℃ 100℃	12 6.5	12 8	10 7	10 7	10 7	18 8	20 15	20 15
相對損失因子 Loss Factor	100KHz & <0.2mT 10^{-6}	25℃	< 10	< 5	< 10	< 6	< 5	< 5	< 5	< 6
功率損耗 Pcv Power Loss	25KHz/200mT kW/m³	25℃	110	120	100	< 20	< 10			
		100℃	60	50	60	< 80	< 70			
	100KHz/200mT kW/m³	25℃	720	600	600	350	340	500	800	> 1500
		100℃	480	330	400	330	400	450	900	> 1500
	300KHz/100mT kW/m³	25℃	660	800	620	380	260	150	300	300
		100℃	400	500	420	360	310	280	350	560
	500KHz/50mT kW/m³	25℃			270	200	150	120	80	60
		100℃			200	200	150	100	80	60
	500KHz/100mT kW/m³	25℃					> 900	800	550	400
		100℃					> 1500	700	700	600
	1MHz/50mT kW/m³	25℃						700	155	70
		100℃						600	100	80

NOTES:

所有数值均为从环形磁芯测量中获得的典型数值。由于几何形状和尺寸的影响，产品规格将与这些数据不同。

All values are typical values obtained from toroidal core measurements. Due to the influence of geometric shapes and sizes, product specifications will differ from these data.

特性 Characteristics	測試條件/單位 Test condition /Unit	溫度 Temp	TM71	TM82	T2	T2M	TB2
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT	25℃	3800 ±25%	1200 ±25%	2800 ±25%	2000± 25%	1500 ±25%
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	>4000	>4000	>1000	>500	>900
	25KHZ/320mT	100℃	>3200	>2200	>500	>500	>500
飽和磁通密度 Bs Sturation Flux Density	1200A/M mT	25℃ 100℃	550 425	600 500	510 390	510 410	580 460
殘留磁通密度 Br Remanence	1200A/M mT	25℃ 100℃	80 150	80 100	135 110	130 130	420 330
矯頑力 Hc Coercivity	1200A/M A/M	25℃ 100℃	6 2.5	12 10	15 10	10 10	30 25
相對損失因子 Loss Factor	100KHz & <0.2mT 10^{-6}	25℃	< 4	< 15	< 12	< 25	< 40
功率損耗 Pcv Power Loss	25KHz/200mT kW/m^3	25℃	50	200	110	270	310
		100℃	150	330	200	330	430
	100KHz/100mT kW/m^3	25℃	50		110	360	440
		100℃	200		240	520	760
	100KHz/200mT kW/m^3	25℃	400	900	700		
		100℃	1100	1600	1100		
	300KHz/50mT kW/m^3	25℃	50				
		100℃	170				
	500KHz/50mT kW/m^3	25℃	190				
		100℃	525				

NOTES:

所有数值均为从环形磁芯测量中获得的典型数值。由于几何形状和尺寸的影响，产品规格将与这些数据不同。

All values are typical values obtained from toroidal core measurements. Due to the influence of geometric shapes and sizes, product specifications will differ from these data.

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

TP40 功率铁氧体材料 (POWER FERRITE MATERIAL TP40)

一种低中频多用途铁氧体材料，可用于电源变压器、电感和滤波器材料。可提供的各式形状和环形的产品外形。最低功率损耗温度点在80 - 90℃之间。

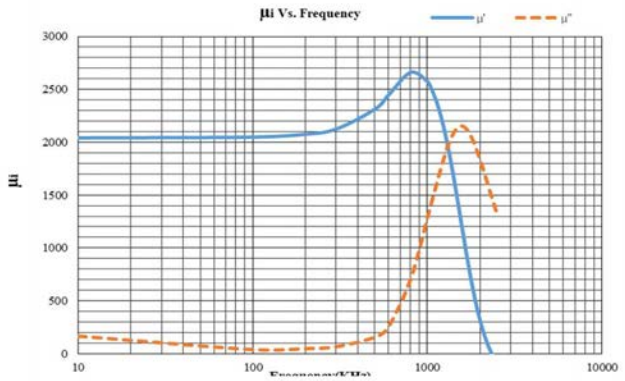
A low to medium frequency multi-purpose ferrite material suitable for power transformers, inductors, and filter materials. It can be provided in various shapes and ring-shaped product forms. The lowest power loss temperature point is between 80 - 90℃.

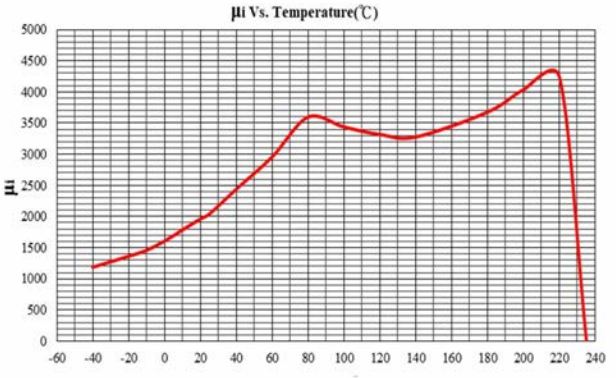
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		2000±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 3000	
	25KHz/320mT	100℃	> 3200	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	480	mT
		100℃	390	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	150	mT
		100℃	60	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	12	A/m
		100℃	6.5	
相對損失因子 Loss Factor	100KHz & <0.2mT		<10	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>220	℃
密度 D Density	阿基米德法 Archimedes method		4.8	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>9	Ω-m
功率損耗 Pcv Power Loss	25KHz/200mT	25℃	110	kW/m^3
		100℃	60	
	100KHz/200mT	25℃	720	
		100℃	480	
	300KHz/100mT	25℃	660	
		100℃	400	

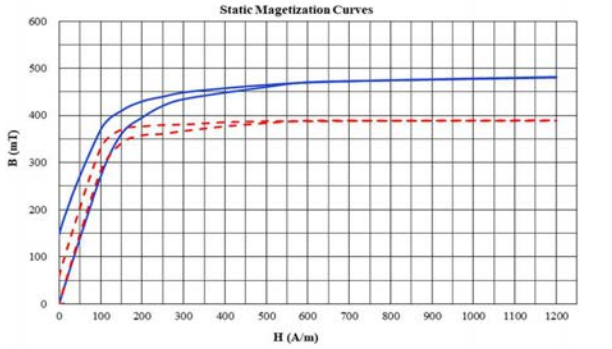
备注：各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

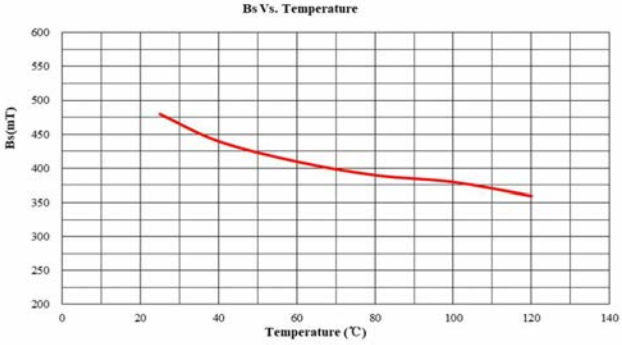
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

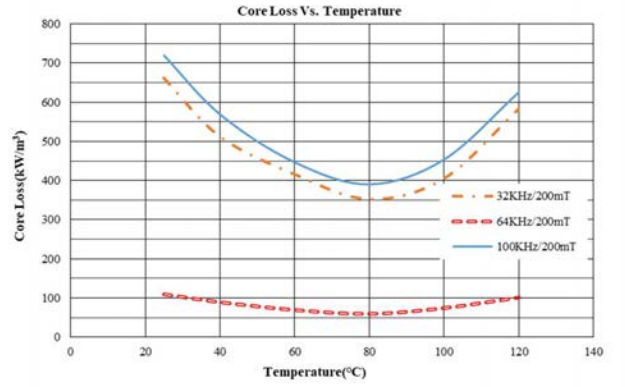
TP40 功率铁氧体材料 (Power Ferrite Material TP40)

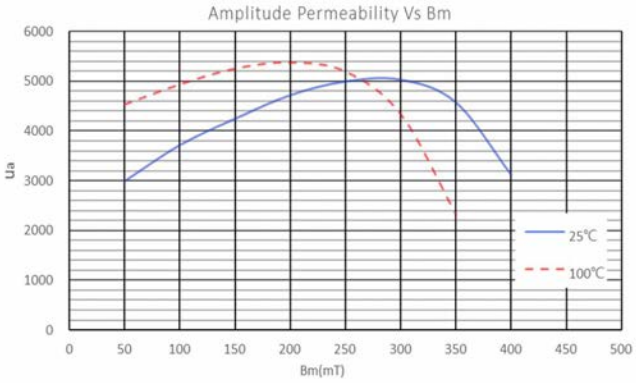


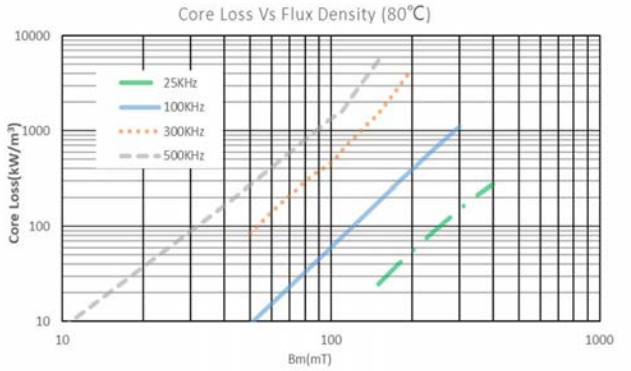












Steinmetz Model

$Pcv = K * f^a * Bm^b$				
Temp	Freq.(KHz)	K	a	b
80	≦500	3.91E-06	1.51865	2.16883
100	≦500	4.48E-07	1.73981	2.42323

Unit: Pcv:Kw/m^3 / Freq:KHz / Bm:mT

TP44 功率铁氧体材料 (POWER FERRITE MATERIAL TP44)

一种中频率多用途铁氧体材料，可用于电源变压器、电感和滤波器材料。可提供的各式形状和环形的产品外形。在高温时有更低的功率损耗密度值，最低功率损耗温度点在90 - 100℃之间。

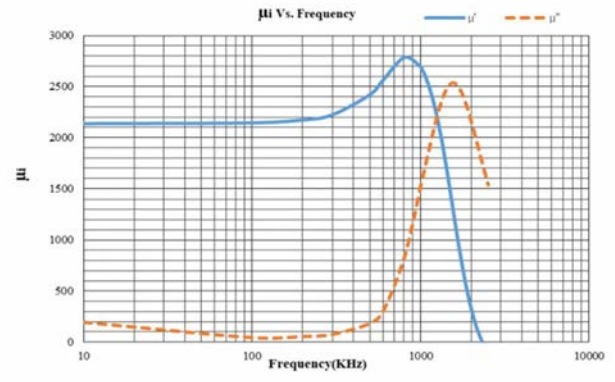
A medium-frequency multi-purpose ferrite material suitable for power transformers, inductors, and filter materials. It can be provided in various shapes and ring-shaped product forms. It exhibits lower power loss density at high temperatures, with the lowest power loss temperature point between 90 - 100℃.

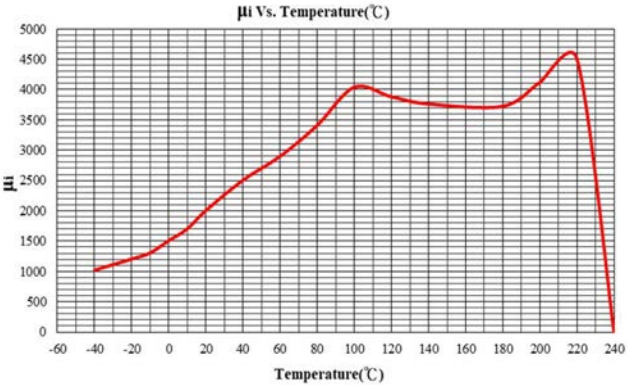
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		2000±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 3000	
	25KHz/320mT	100℃	> 2700	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	500	mT
		100℃	400	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	150	mT
		100℃	80	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	12	A/m
		100℃	8	
相對損失因子 Loss Factor	100KHz & <0.2mT		< 5	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>220	℃
密度 D Density	阿基米德法 Archimedes method		4.8	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>6.5	Ω-m
功率損耗 Pcv Power Loss	25KHz/200mT	25℃	120	kW/m^3
		100℃	50	
	100KHz/200mT	25℃	600	
		100℃	330	
	300KHz/100mT	25℃	800	
		100℃	500	

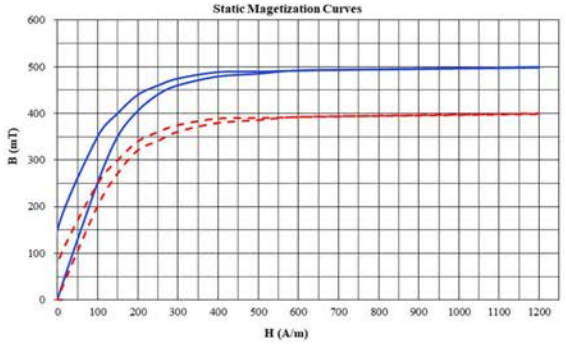
备注：各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

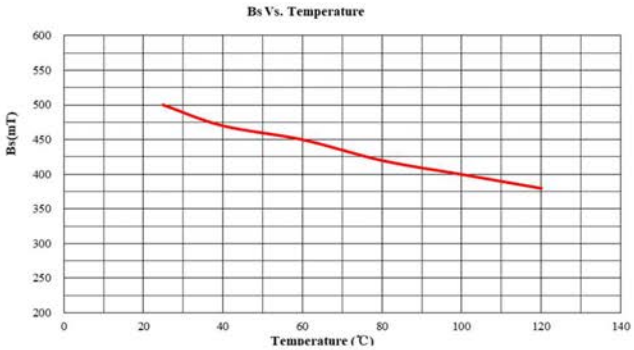
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

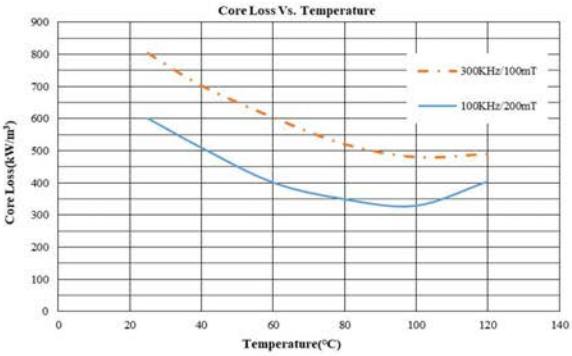
TP44 功率铁氧体材料 (Power Ferrite Material TP44)

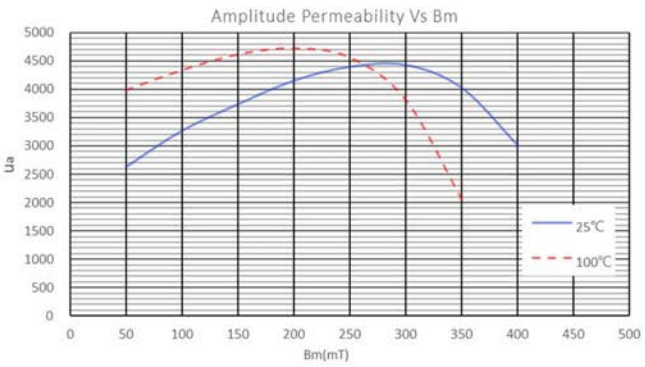


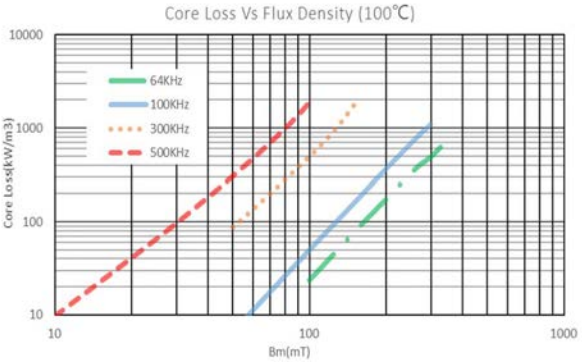












Steinmetz Model

$$Pcv = K * f^{a} * Bm^{b}$$

Temp	Freq.(KHz)	K	a	b
100	≦500	6.64E-08	1.95132	2.55001

Unit: Pcv:Kw/m^3 / Freq:KHz / Bm:mT

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

TP45 功率铁氧体材料 (POWER FERRITE MATERIAL TP45)

一种中高频率多用途铁氧体材料，可用于电源变压器、电感和滤波器材料。可提供的各式形状和环形的产品外形。在高频时有更低的功率损耗密度值，最低功率损耗温度点在80 - 90℃之间。

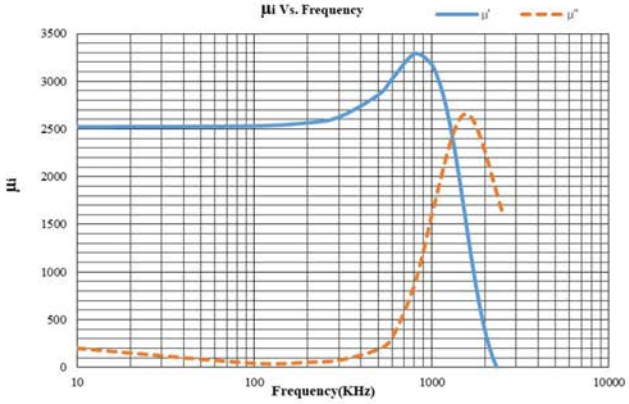
A medium to high frequency multi-purpose ferrite material suitable for power transformers, inductors, and filter materials. It can be provided in various shapes and ring-shaped product forms. It exhibits lower power loss density at high frequencies, with the lowest power loss temperature point between 80 - 90℃.

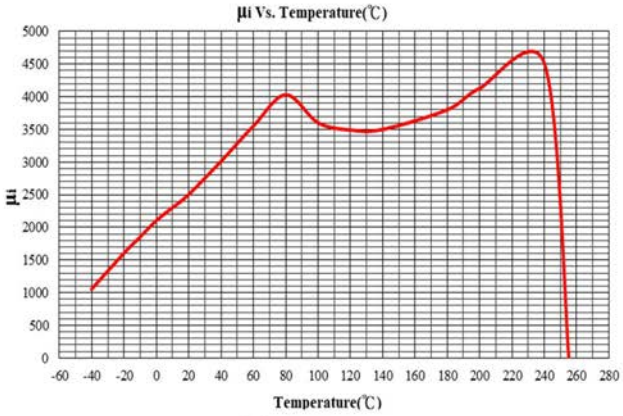
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		2500±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 4000	
	25KHz/320mT	100℃	> 3500	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	500	mT
		100℃	400	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	130	mT
		100℃	70	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	10	A/m
		100℃	7	
相對損失因子 Loss Factor	100KHz & <0.2mT		<10	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>210	℃
密度 D Density	阿基米德法 Archimedes method		4.8	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>6	Ω-m
功率損耗 Pcv Power Loss	100KHz/200mT	25℃	600	kW/m^3
		100℃	400	
	300KHz/100mT	25℃	620	
		100℃	420	
	500KHz/50mT	25℃	270	
		100℃	200	

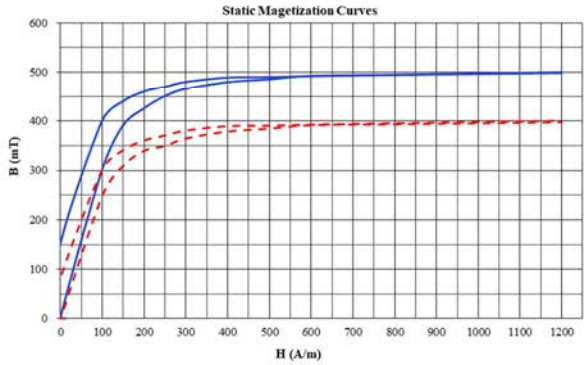
备注：各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

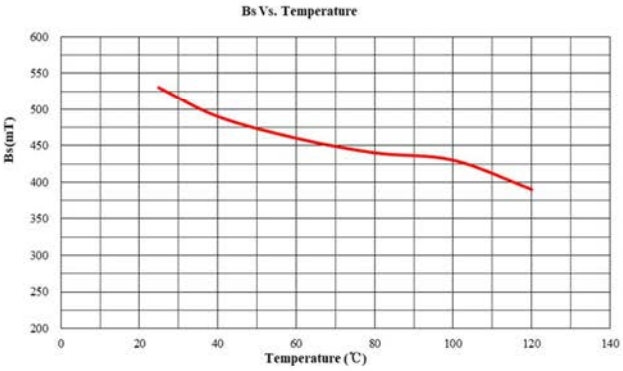
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

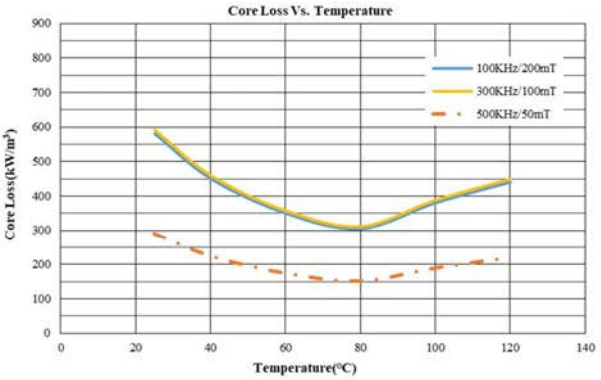
TP45 功率铁氧体材料 (Power Ferrite Material TP45)

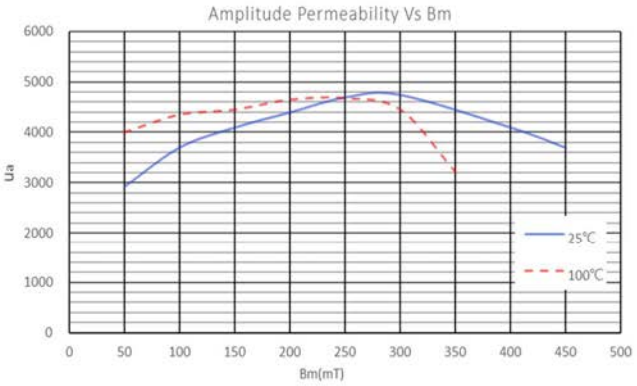


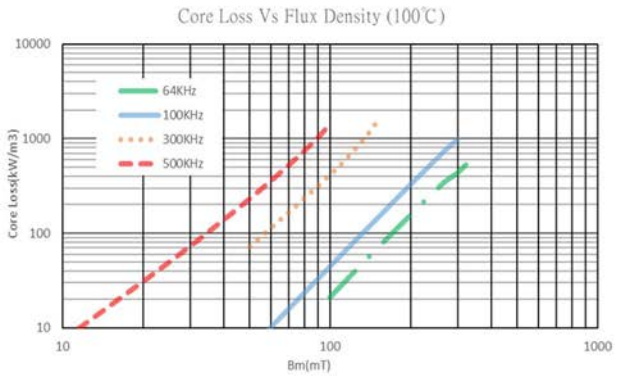












Steinmetz Model

$Pcv = K * f^a * Bm^b$

Temp	Freq.(KHz)	K	a	b
80	≦500	7.85E-08	1.87237	2.54868
100	≦500	4.75E-07	1.7414	2.35204

Unit: Pcv:Kw/m^3 / Freq:KHz / Bm:mT

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

TM80 功率铁氧体材料 (POWER FERRITE MATERIAL TM80)

宽温度区间内低能量损耗密度，以及相对较高的饱和磁通密度，中高频率的多用途铁氧体材料，可用于电源变压器、电感和滤波器材料。可提供的各式形状和环形的产品外形。

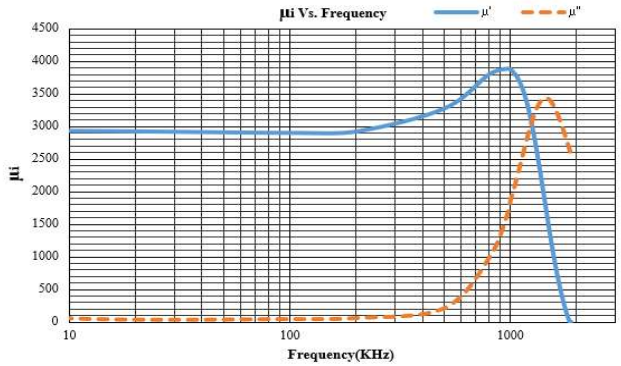
A multi-purpose ferrite material for medium to high frequencies with low energy loss density within a wide temperature range, and relatively high saturation magnetic flux density. It can be used for power transformers, inductors, and filter materials. Various shapes and ring-shaped product forms are available.

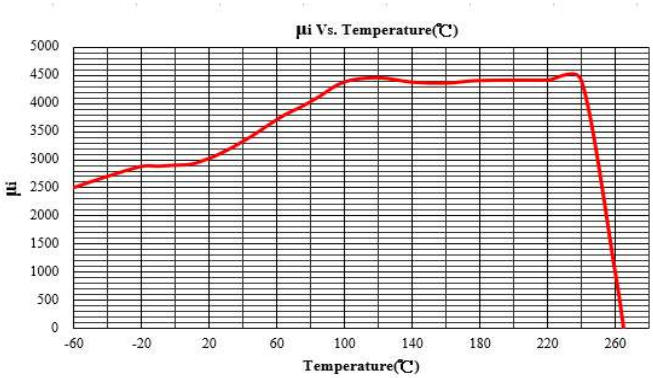
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		3000±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 4000	
	25KHz/320mT	100℃	> 4000	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	520	mT
		100℃	420	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	80	mT
		100℃	60	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	10	A/m
		100℃	7	
相對損失因子 Loss Factor	100KHz & <0.2mT		<6	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>230	℃
密度 D Density	阿基米德法 Archimedes method		>4.8	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>5.5	Ω-m
功率損耗 Pcv Power Loss	100KHz/200mT	25℃	350	kW/m^3
		100℃	330	
	300KHz/100mT	25℃	380	
		100℃	360	
	500KHz/50mT	25℃	200	
		100℃	200	

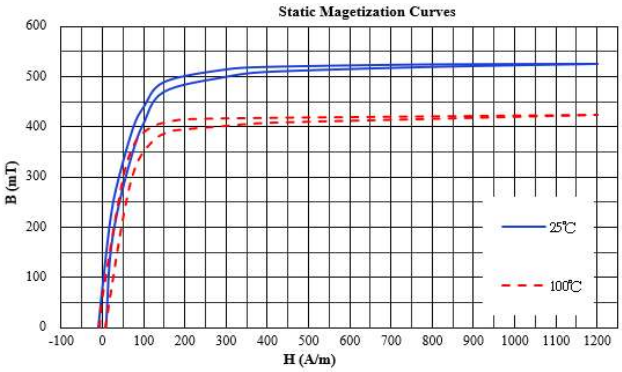
备注：各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

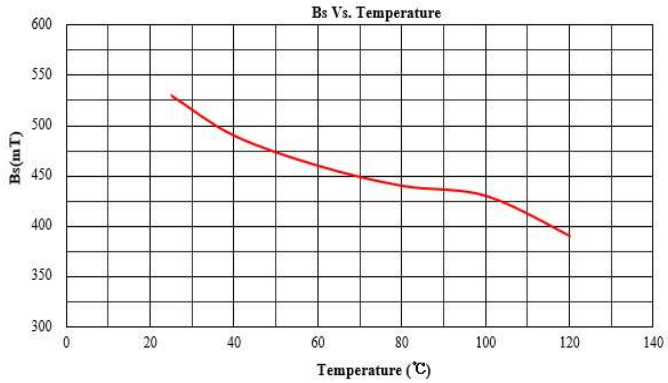
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

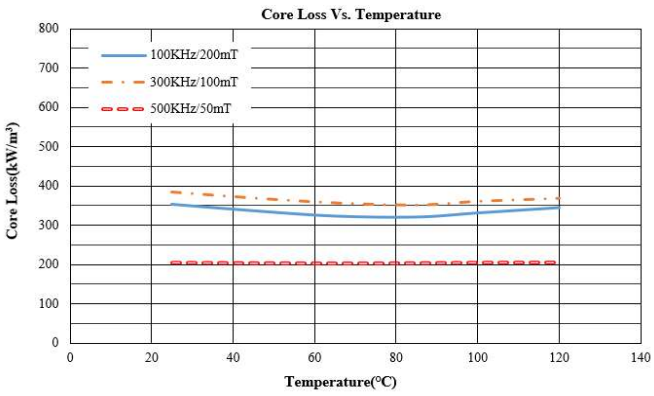
TM80 功率铁氧体材料 (Power Ferrite Material TM80)

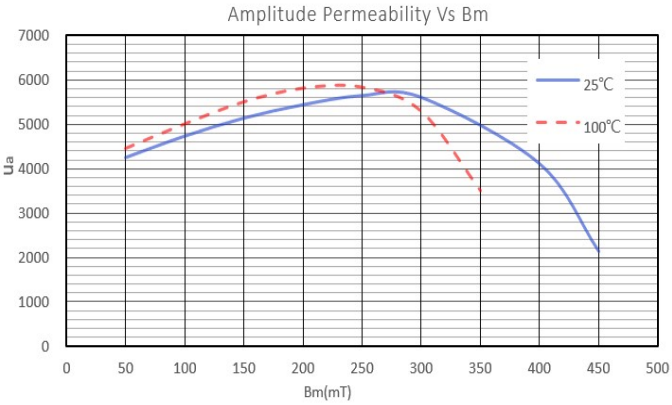


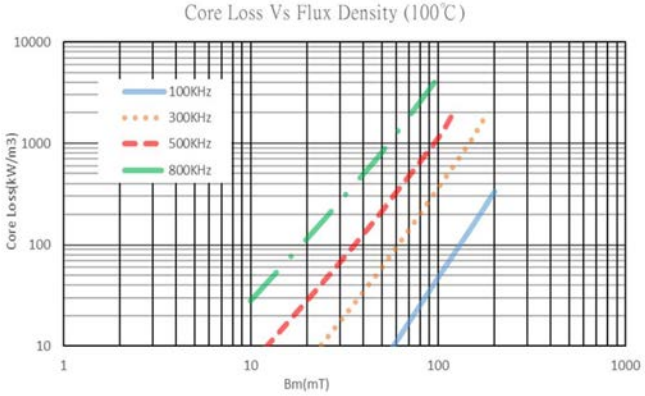












Steinmetz Model

$Pcv = K * f^a * Bm^b$

Temp	Freq.(KHz)	K	a	b
100	≦200	1.09E-07	1.7553	2.63056
100	≦500	4.03E-07	1.71695	2.40254

Unit: Pcv:Kw/m^3 / Freq:KHz / Bm:mT

TM81 功率铁氧体材料 (POWER FERRITE MATERIAL TM81)

宽温度区间内有相对更低的能量损耗密度，以及相对较高的饱和磁通密度，中高频率的多用途铁氧体材料，可用于电源变压器、电感和滤波器材料。可提供各式形状和环形的产品外形。

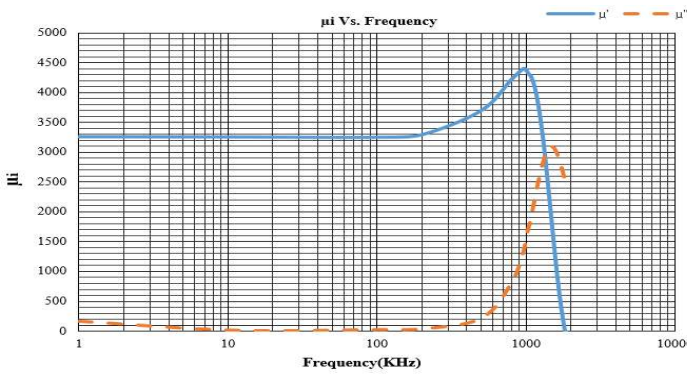
Within a wide temperature range, there is a relatively lower energy loss density and a relatively higher saturation magnetic flux density. These medium to high frequency multi-purpose ferrite materials can be used for power transformers, inductors, and filter materials. They can provide various shapes and ring-shaped product forms.

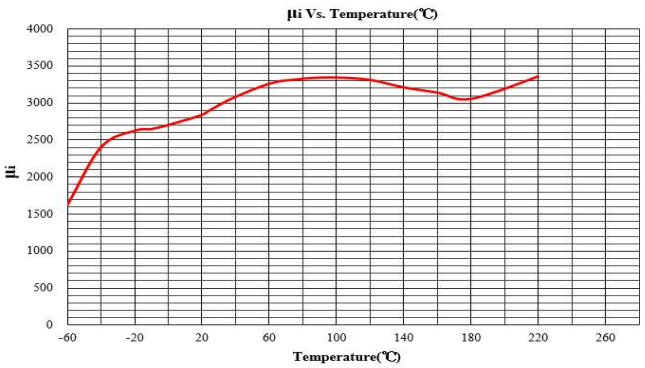
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		3000±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 4000	
	25KHz/320mT	100℃	> 3400	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	520	mT
		100℃	420	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	70	mT
		100℃	50	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	10	A/m
		100℃	7	
相對損失因子 Loss Factor	100KHz & <0.2mT		<5	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>220	℃
密度 D Density	阿基米德法 Archimedes method		>4.85	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>5	Ω-m
功率損耗 Pcv Power Loss	100KHz/200mT	25℃	340	kW/m^3
		100℃	400	
	200KHz/125mT	25℃	230	
		100℃	270	
	300KHz/100mT	25℃	260	
		100℃	310	

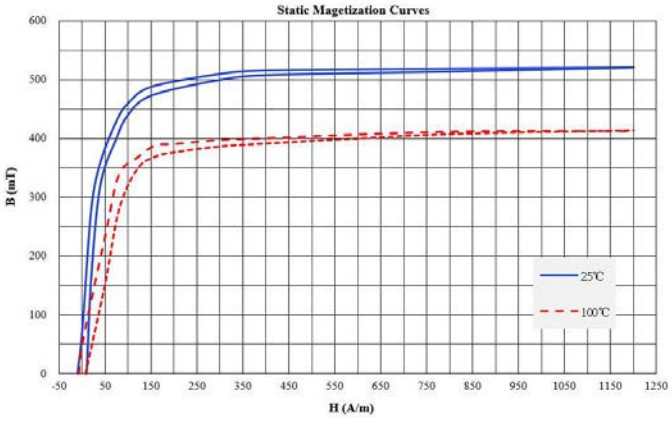
备注：各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

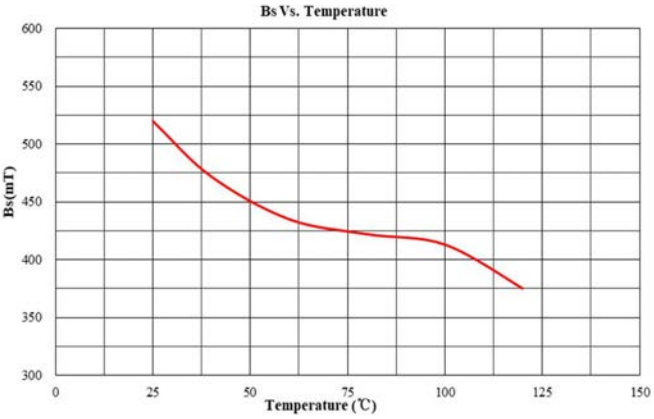
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

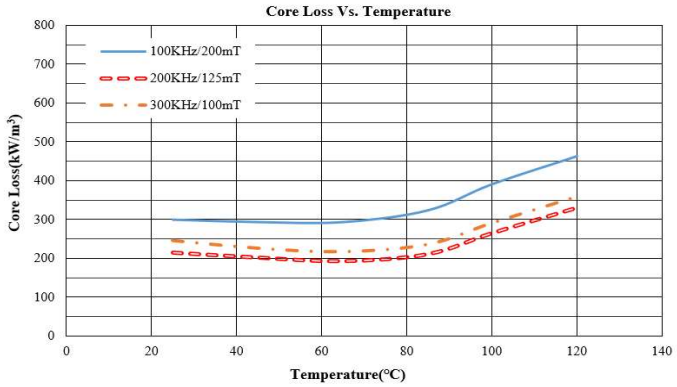
TM81 功率铁氧体材料 (Power Ferrite Material TM81)

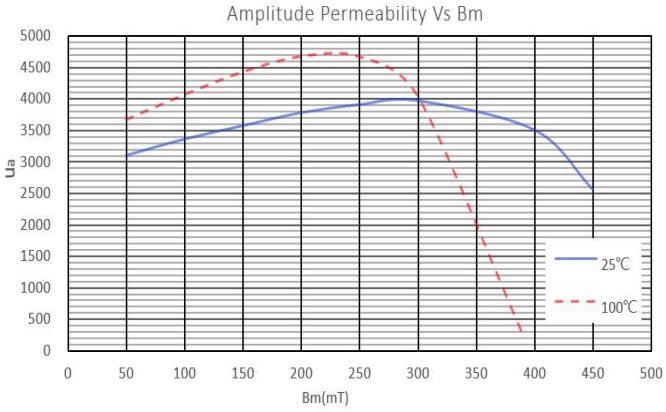


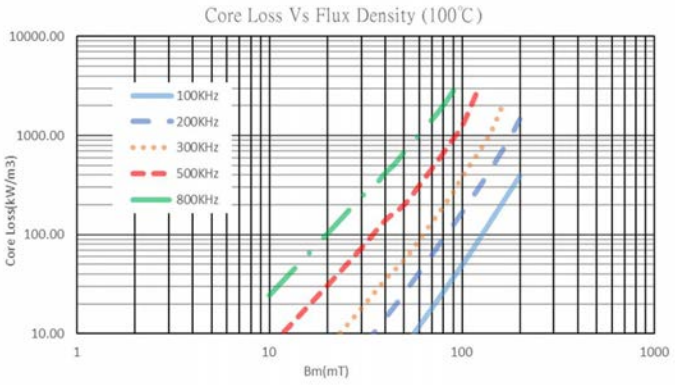












Steinmetz Model

$$Pcv = K * f^{a} * Bm^{b}$$

Temp	Freq.(KHz)	K	a	b
100	≦200	6.48E-08	1.73019	2.7204
100	≦500	1.07E-06	1.62784	2.27797
100	≦1000	3.79E-06	1.71035	1.93164

Unit: Pcv:Kw/m^3 / Freq:KHz / Bm:mT

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

TM50A 功率铁氧体材料 (POWER FERRITE MATERIAL TM50A)

在高频≧500KHz有相对更低的能量损耗密度，以及相对较高的饱和磁通密度，是一种高频率的多用途铁氧体材料，特别适合于功率电感的应用。可提供的各式形状和环形的产品外形。

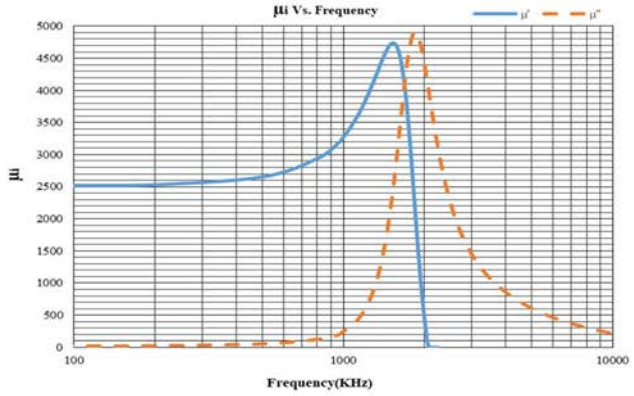
A high-frequency multi-purpose ferrite material, particularly suitable for power inductor applications, with relatively lower energy loss density and relatively higher saturation magnetic flux density at high frequencies (≥500kHz). Various shapes and ring-shaped product forms are available.

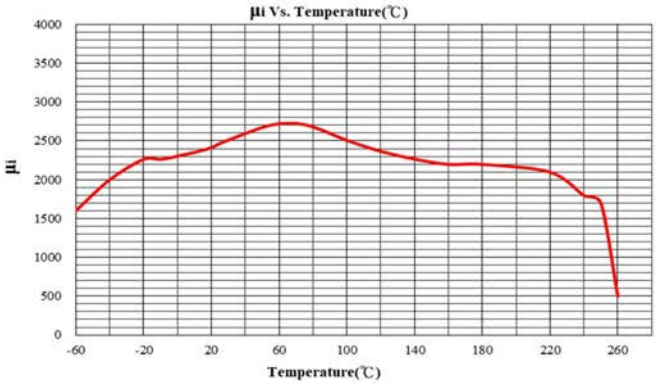
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		2500±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 3500	
	25KHz/320mT	100℃	> 3500	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	550	mT
		100℃	450	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	90	mT
		100℃	70	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	18	A/m
		100℃	8	
相對損失因子 Loss Factor	100KHz & <0.2mT		<5	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>240	℃
密度 D Density	阿基米德法 Archimedes method		>4.85	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>10	Ω-m
功率損耗 Pcv Power Loss	300KHz/100mT	25℃	150	kW/m^3
		100℃	280	
	500KHz/100mT	25℃	800	
		100℃	700	
	1000KHz/30mT	25℃	210	
		100℃	150	

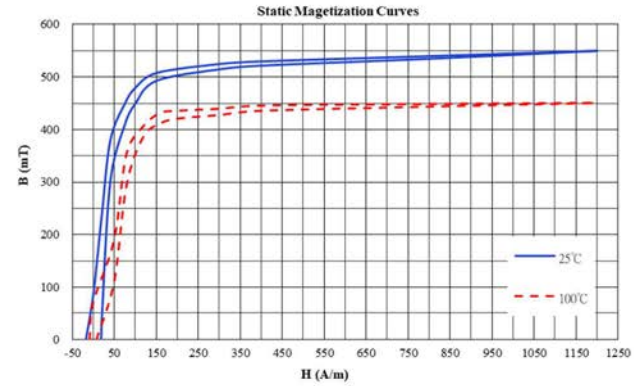
备注：各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

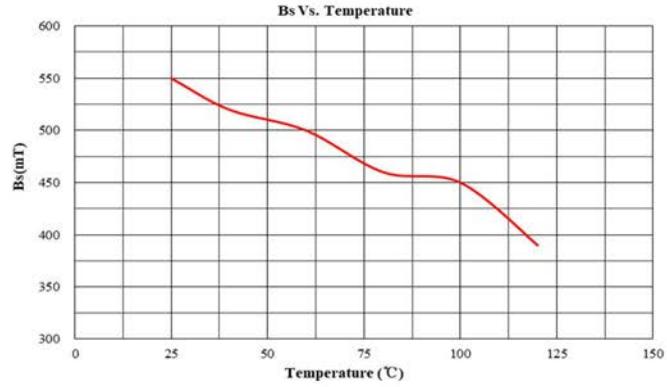
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

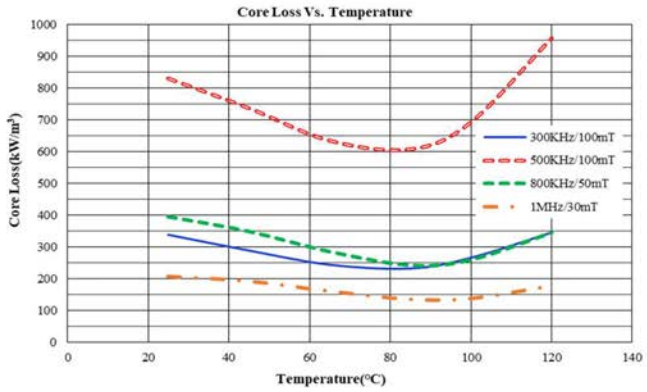
TM50A 功率铁氧体材料 (Power Ferrite Material TM50A)

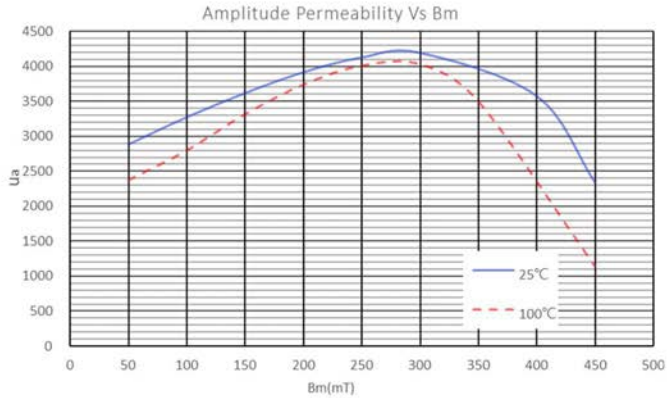


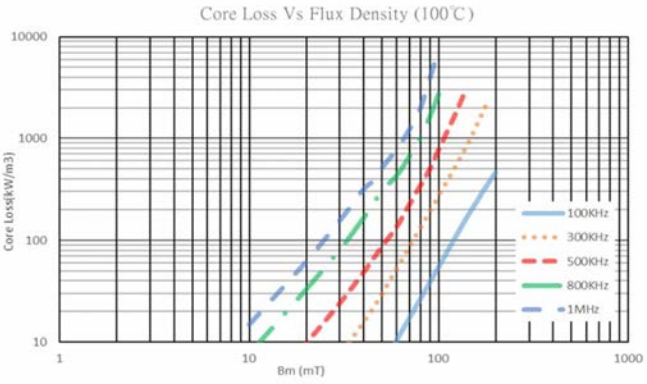












Steinmetz Model

$Pcv = K * f^{a} * Bm^{b}$

Temp	Freq.(KHz)	K	a	b
100	≦500	1.16E-07	1.4754	2.89164
100	≦1000	2.31E-06	1.51745	2.20134

Unit: Pcv:KW/m^3 / Freq:KHz / Bm:mT

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

TM61 功率铁氧体材料 (POWER FERRITE MATERIAL TM61)

在高频率500KHz到3MHZ下，有相对更低的能量损耗密度，以及相对较高的饱和磁通密度，高频率的多用途铁氧体材料，可用于高频下的电源变压器、功率电感。可提供各式形状和环形的产品外形。

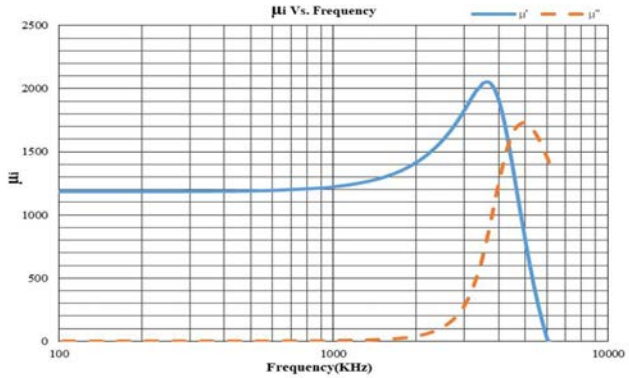
A high-frequency multi-purpose ferrite material suitable for power transformers and power inductors operating at frequencies between 500kHz and 3MHz, characterized by relatively lower energy loss density and relatively higher saturation magnetic flux density at high frequencies. Various shapes and ring-shaped product forms are available.

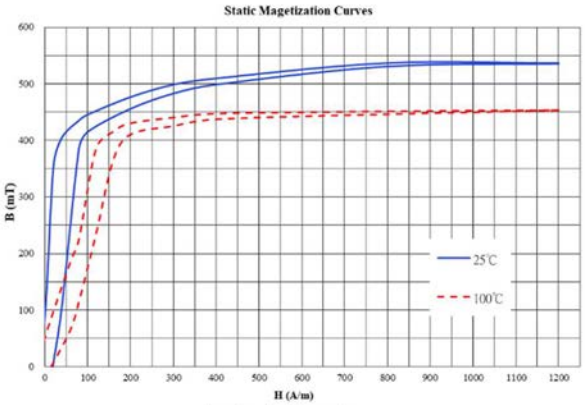
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		1000±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 2200	
	25KHz/320mT	100℃	> 2000	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 50Hz	25℃	540	mT
		100℃	440	
殘留磁通密度 Br Remanence	1200 A/m 50Hz	25℃	90	mT
		100℃	50	
矯頑力 Hc Coercivity	1200 A/m 50Hz	25℃	20	A/m
		100℃	15	
相對損失因子 Loss Factor	100KHz		<5	10^{-6}
	1MHz		<10	
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>260	℃
密度 D Density	阿基米德法 Archimedes method		4.85	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		10	Ω-m
功率損耗 Pcv Power Loss	500KHz/100mT	25℃	550	kW/m^3
		100℃	700	
	1MHz/50mT	25℃	190	
		100℃	155	
	3MHz/10mT	25℃	100	
		100℃	90	

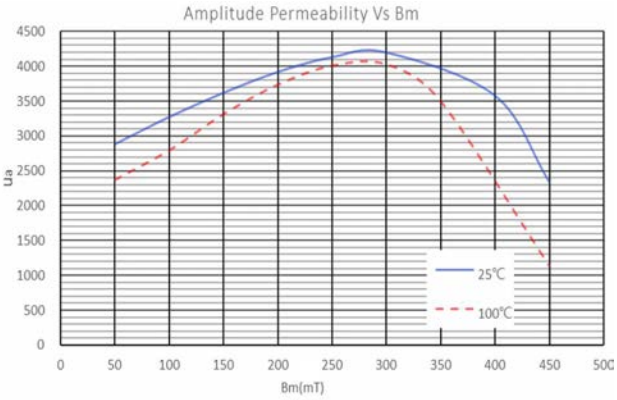
备注:各項數值均為環形磁芯 T12.5*7.5*7 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

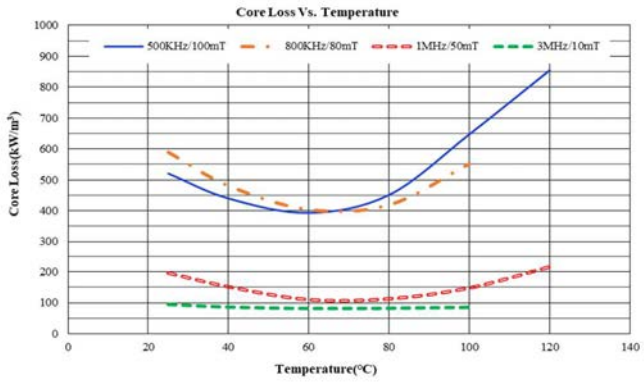
Note：All values are typical values measured for the toroidal magnetic core T12.5*7.5*7. Due to the influence of geometric shape and size, the product specifications may differ from these data.

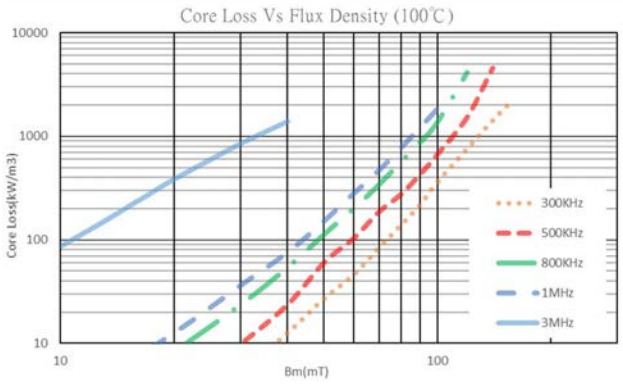
TM61 功率铁氧体材料 (Power Ferrite Material TM61)

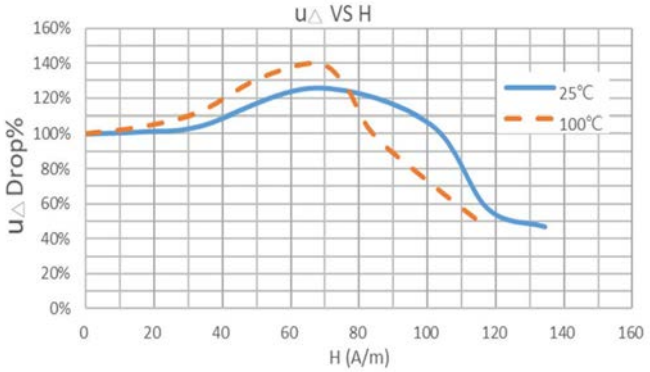












Steinmetz Model

$$Pcv = k * f^a * Bm^b$$

Temp	Freq.(KHz)	k	a	b
100	≦500	1.15E-08	1.29795	3.63096
100	≦1000	5.21E-09	1.35237	3.7374
100	≦3000	5.60E-06	1.65511	1.57087

Unit: Pcv:KW/m^3 / Freq:KHz / Bm:mT

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

TM63 功率铁氧体材料 (POWER FERRITE MATERIAL TM63)

在高频率1MHz到5MHZ下，有相对更低的能量损耗密度，以及相对较高的饱和磁通密度，高频率的多用途铁氧体材料，可用于高频下的电源变压器、功率电感。可提供各式形状和环形的产品外形。

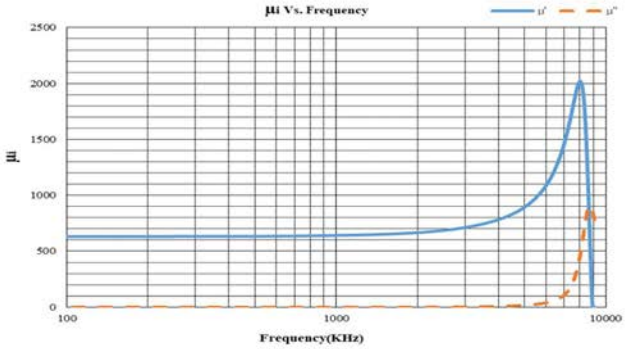
A high-frequency multi-purpose ferrite material suitable for power transformers and power inductors operating at frequencies between 1MHz and 5MHz, characterized by relatively lower energy loss density and relatively higher saturation magnetic flux density at high frequencies. Various shapes and ring-shaped product forms are available.

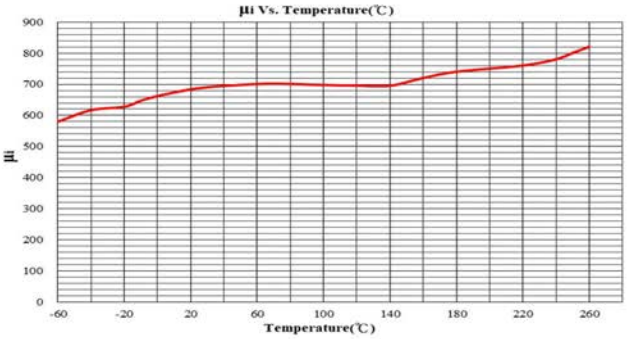
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		700±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 1400	
	25KHz/320mT	100℃	> 1200	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 50Hz	25℃	540	mT
		100℃	450	
殘留磁通密度 Br Remanence	1200 A/m 50Hz	25℃	100	mT
		100℃	90	
矯頑力 Hc Coercivity	1200 A/m 50Hz	25℃	20	A/m
		100℃	15	
相對損失因子 Loss Factor	1MHz		<6	10^{-6}
	5MHz		<30	
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>290	℃
密度 D Density	阿基米德法 Archimedes method		>4.85	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		10	Ω-m
功率損耗 Pcv Power Loss	500KHz/100mT	25℃	400	kW/m^3
		100℃	600	
	1MHz/50mT	25℃	70	
		100℃	80	
	2MHz/50mT	25℃	200	
		100℃	250	
	3MHz/30mT	25℃	140	
		100℃	180	

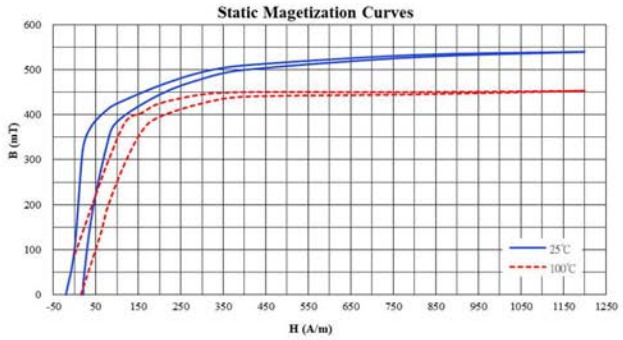
备注：各項數值均為環形磁芯 T12.5*7.5*7 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

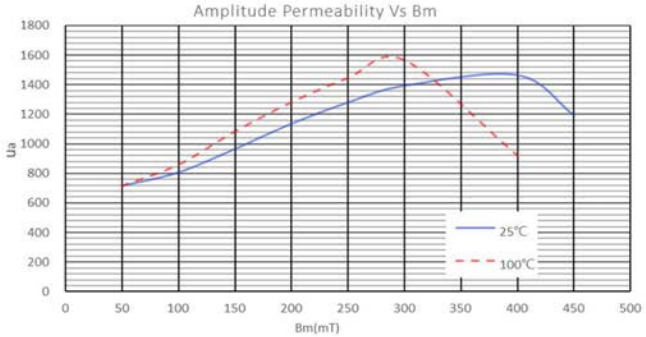
Note：All values are typical values measured for the toroidal magnetic core T12.5*7.5*7. Due to the influence of geometric shape and size, the product specifications may differ from these data.

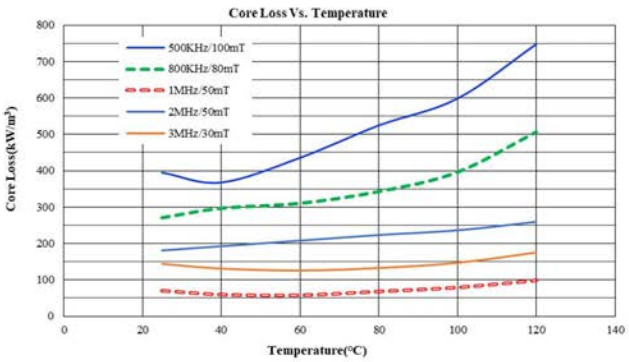
TM63 功率铁氧体材料 (Power Ferrite Material TM63)

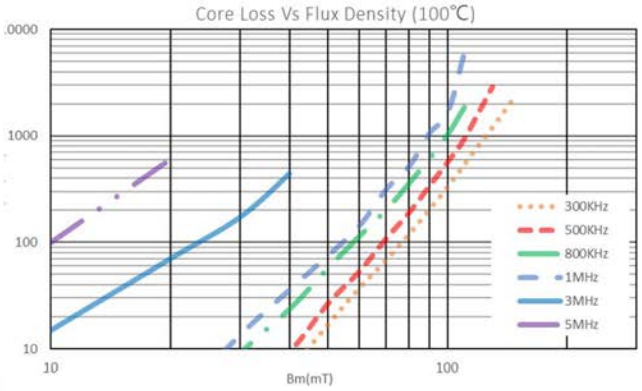


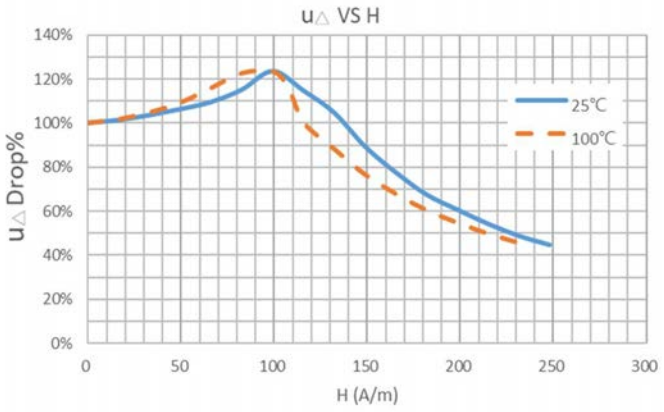












Steinmetz Model

$$Pcv = k * f^{a} * Bm^{b}$$

Temp	Freq.(KHz)	k	a	b
100	≦500	2.80E-08	0.989056	3.83745
100	≦1000	5.27E-09	1.13879	3.96891
100	≦5000	3.57E-07	1.93874	1.47495

Unit: Pcv:KW/m^3 / Freq:KHz / Bm:mT

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

TM71 功率铁氧体材料 (POWER FERRITE MATERIAL TM71)

高磁通密度以及高磁导率的锰锌铁氧体材料适用于低中频电路应用，如电源变压器、电感器、LED驱动器和电源适配器。适合的产品形状通常包括EE、EI和EFD等形状。

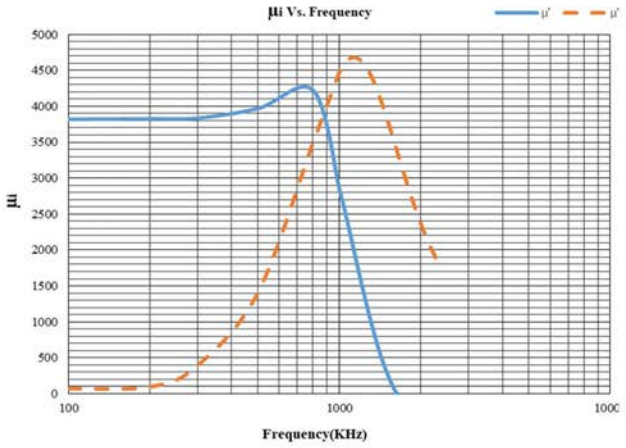
High-flux density and high permeability manganese-zinc ferrite materials are suitable for low to medium frequency circuit applications, such as power transformers, inductors, LED drivers, and power adapters. The suitable product shapes typically include EE, EI, and EFD shapes.

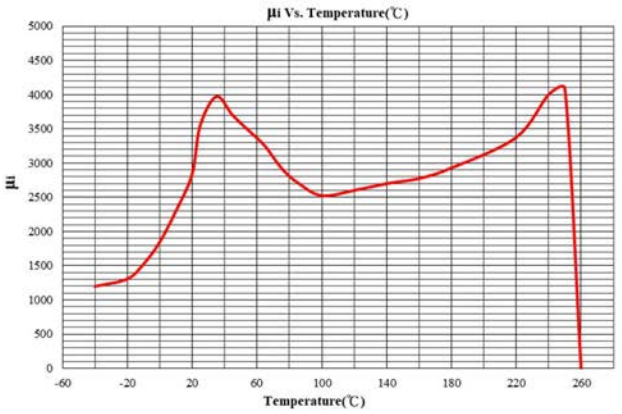
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		3800±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 4000	
	25KHz/320mT	100℃	> 3000	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	550	mT
		100℃	425	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	80	mT
		100℃	150	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	6	A/m
		100℃	2.5	
相對損失因子 Loss Factor	100KHz & <0.2mT		< 4	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		> 255	℃
密度 D Density	阿基米德法 Archimedes method		4.9	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		> 5	Ω-m
功率損耗 Pcv Power Loss	100KHz/200mT	25℃	400	kW/m^3
		100℃	1100	
	300KHz/50mT	25℃	50	
		100℃	170	
	500KHz/50mT	25℃	190	
		100℃	525	

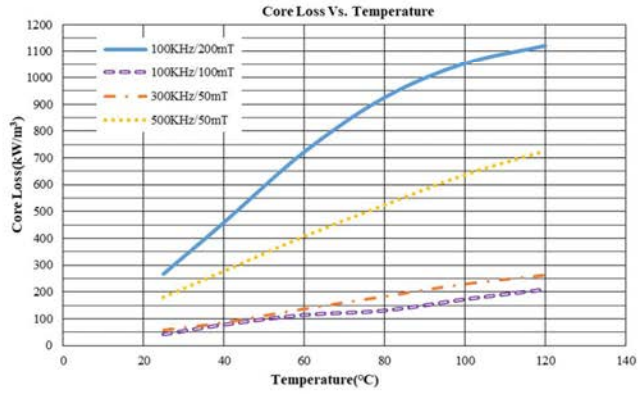
备注:各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

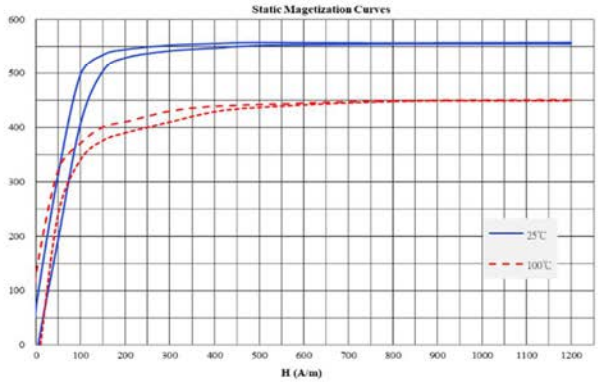
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

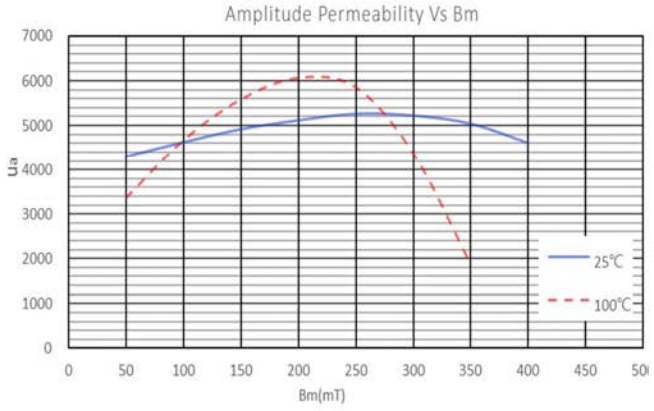
TM71 功率铁氧体材料 (Power Ferrite Material TM71)

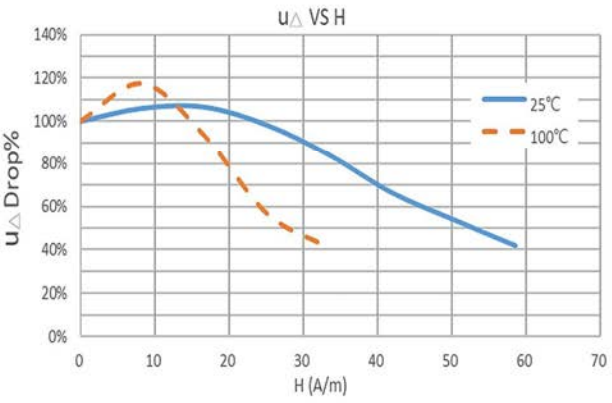












如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

TM82 功率铁氧体材料 (POWER FERRITE MATERIAL TM82)

高磁通密度的锰锌铁氧体材料适用于需要承受高工作电流且频率较低的电路应用。典型的应用包括类A功率放大器、PFC电路、DC-DC转换器以及稳压器等。在这些电路中，锰锌铁氧体材料通常用作电感器，有助于调整电路中的电流和电压，提高系统的效率和性能，适合的产品形状为PQ/ER/RM。

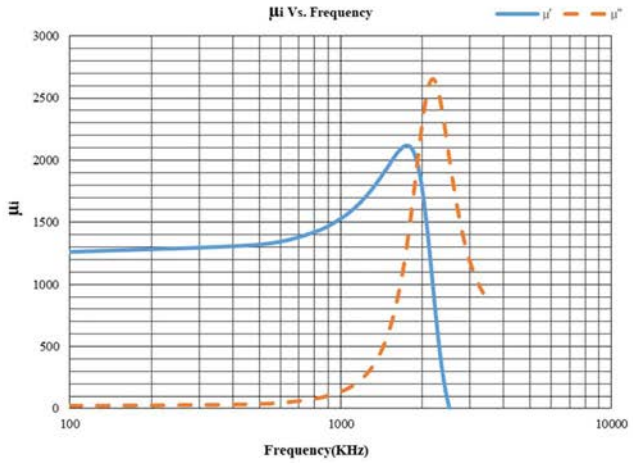
High-flux density manganese-zinc ferrite materials are suitable for circuit applications requiring high operating currents and low frequencies. Typical applications include Class A power amplifiers, PFC circuits, DC-DC converters, and voltage regulators. In these circuits, manganese-zinc ferrite materials are commonly used as inductors to help regulate current and voltage, thereby enhancing system efficiency and performance. The suitable product shapes for these applications are PQ/ER/RM.

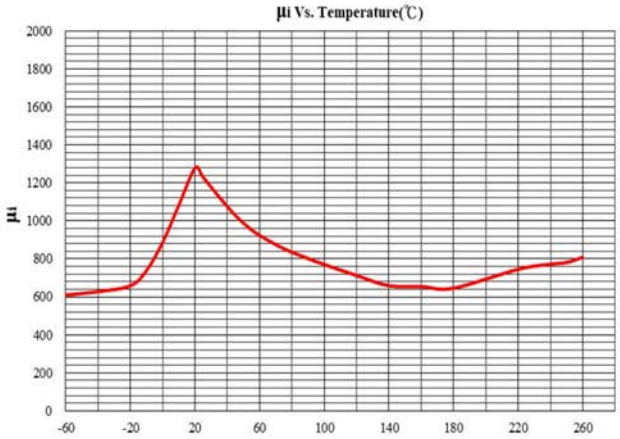
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		1200±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 4000	
	25KHz/320mT	100℃	> 2200	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	600	mT
		100℃	500	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	80	mT
		100℃	100	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	12	A/m
		100℃	10	
相對損失因子 Loss Factor	100KHz & <0.2mT		< 15	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		> 300	℃
密度 D Density	阿基米德法 Archimedes method		4.95	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		> 4	Ω-m
功率損耗 Pcv Power Loss	25KHz/200mT	25℃	200	kW/m^3
		100℃	330	
	100KHz/200mT	25℃	900	
		100℃	1600	

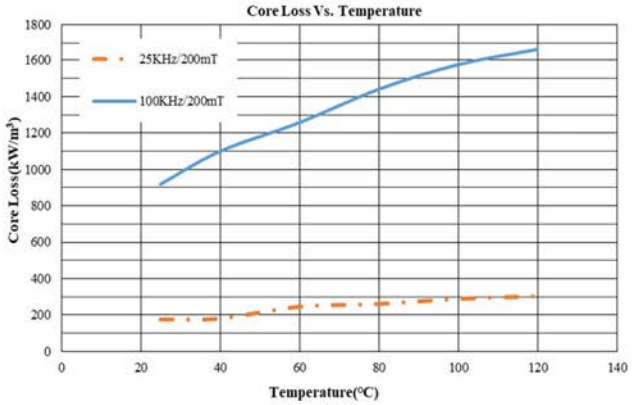
备注:各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

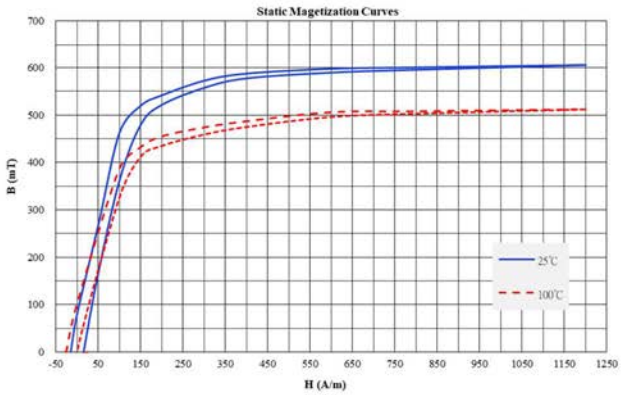
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

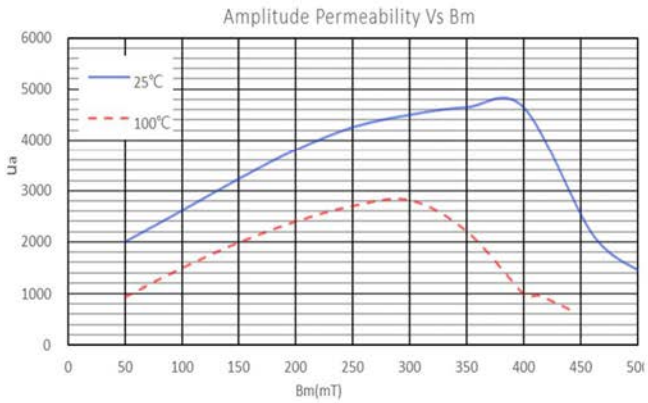
TM82 功率铁氧体材料 (Power Ferrite Material TM82)

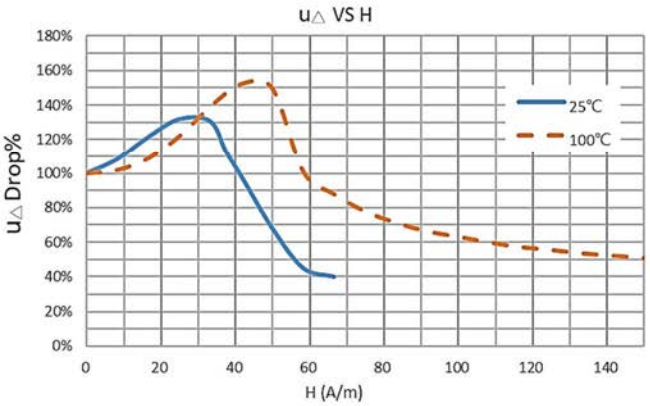












如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

T2 功率铁氧体材料 (POWER FERRITE MATERIAL T2)

一般用途铁氧体材料适合在低频率100KHz以下，有良好的饱和磁通密度表现。可用于低频下的功率电感应用。适合使用于DR/DRH/ROD等开放磁路的的产品外形。

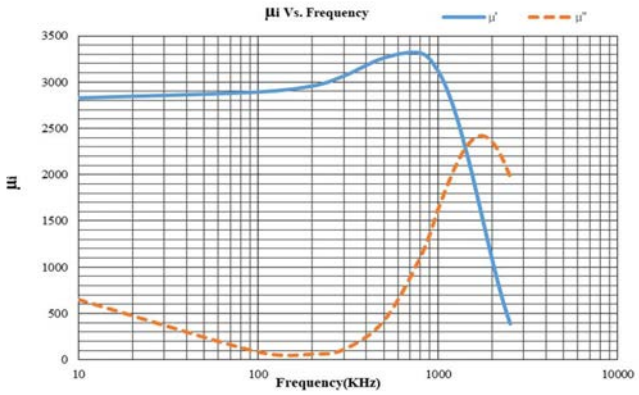
General-purpose ferrite materials are suitable for frequencies below 100kHz, exhibiting good saturation magnetic flux density performance. They are used in power inductor applications at low frequencies. Suitable for products with open magnetic circuit such as DR/DRH/ROD shapes.

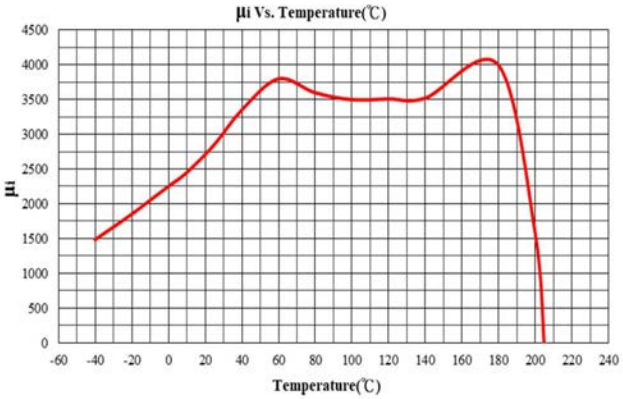
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 ui Initial Permeability	100KHz & <0.2mT		2800±25%	
增幅磁導率 ua Amplitude Permeability	25KHz/400mT	25℃	> 1000	
	25KHz/320mT	100℃	> 500	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	510	mT
		100℃	390	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	135	mT
		100℃	110	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	15	A/m
		100℃	10	
相對損失因子 Loss Factor	100KHz & <0.2mT		< 12	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>180	℃
密度 D Density	阿基米德法 Archimedes method		4.80	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>5	Ω-m
功率損耗 Pcv Power Loss	25KHz/200mT	25℃	110	kW/m^3
		100℃	200	
	100KHz/100mT	25℃	110	
		100℃	240	

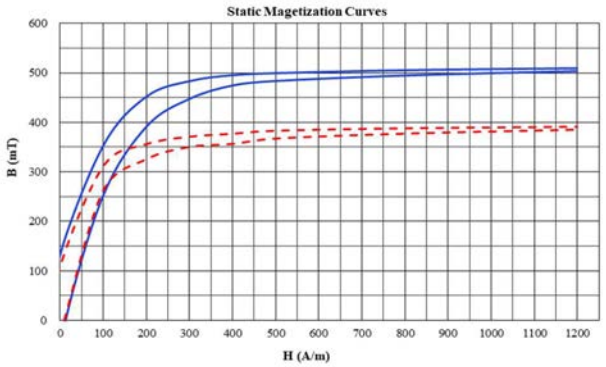
备注:各項數值均為環形磁芯 T31*19*13 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

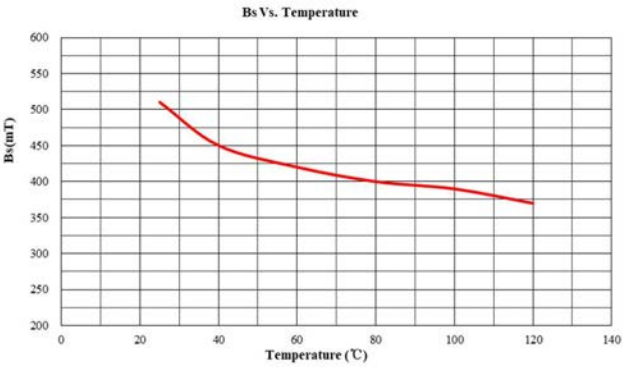
Note：All values are typical values measured for the toroidal magnetic core T31*19*13. Due to the influence of geometric shape and size, the product specifications may differ from these data.

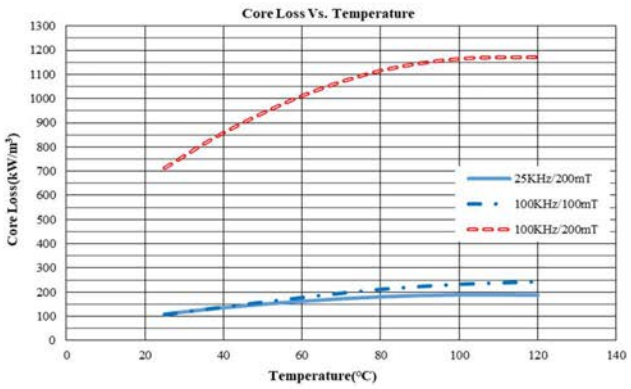
T2 功率铁氧体材料 (Power Ferrite Material T2)

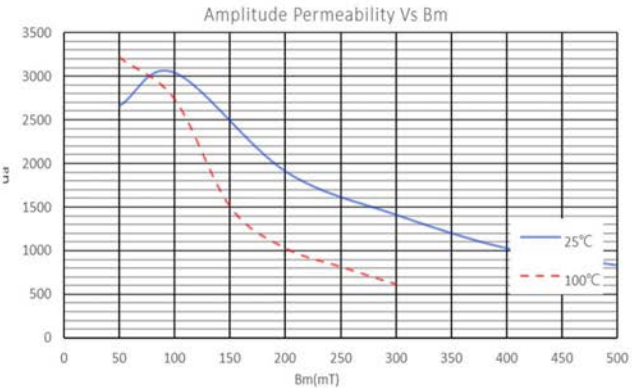












如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

T2M 功率铁氧体材料 (POWER FERRITE MATERIAL T2M)

一般用途铁氧体材料适合在低频率100KHz以下，有良好的饱和磁通密度表现。可用于低频下的功率电感应用。适合使用于DR/DRH/ROD等开放磁路的的产品外形。

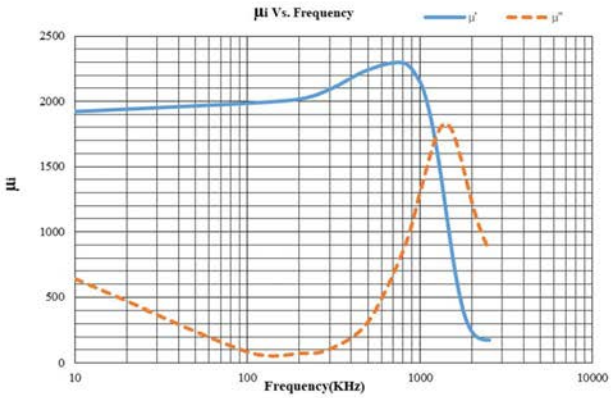
General-purpose ferrite materials are suitable for frequencies below 100kHz, exhibiting good saturation magnetic flux density performance. They are used in power inductor applications at low frequencies. Suitable for products with open magnetic circuit such as DR/DRH/ROD shapes.

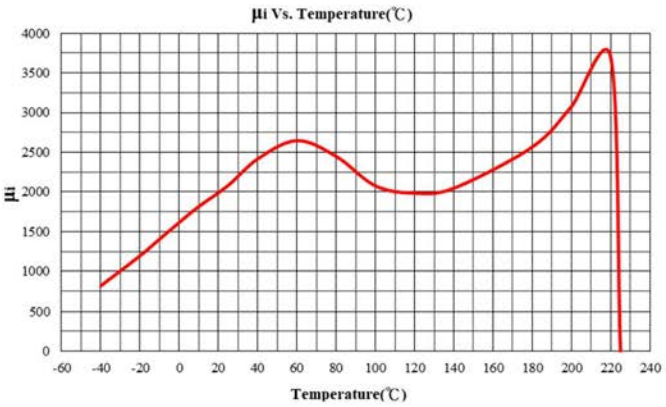
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		2000±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 500	
	25KHz/320mT	100℃	> 500	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	510	mT
		100℃	410	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	130	mT
		100℃	130	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	10	A/m
		100℃	10	
相對損失因子 Loss Factor	100KHz & <0.2mT		< 25	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		> 220	℃
密度 D Density	阿基米德法 Archimedes method		4.90	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>6	Ω-m
功率損耗 Pcv Power Loss	25KHz/200mT	25℃	270	kW/m^3
		100℃	330	
	100KHz/100mT	25℃	360	
		100℃	520	

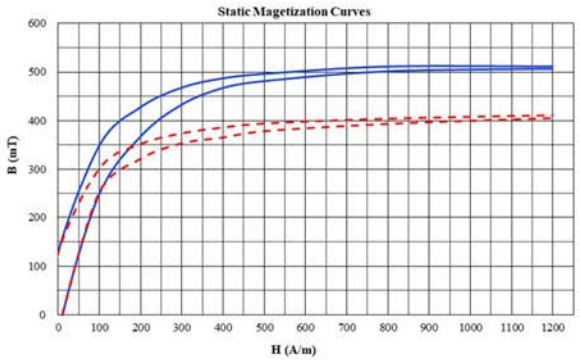
备注:各項數值均為環形磁芯 T31*19*13 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

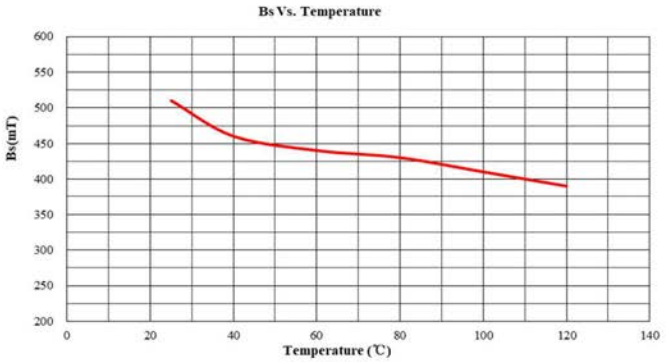
Note：All values are typical values measured for the toroidal magnetic core T31*19*13. Due to the influence of geometric shape and size, the product specifications may differ from these data.

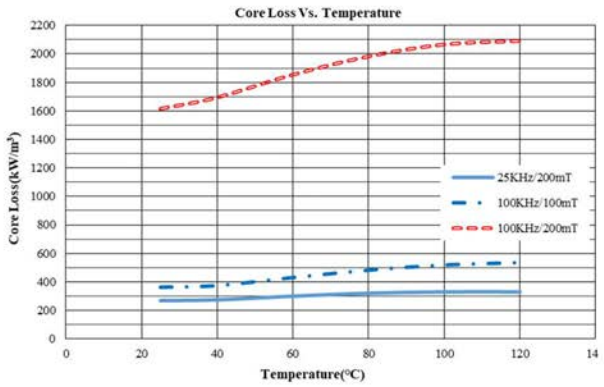
T2M 功率铁氧体材料 (Power Ferrite Material T2M)

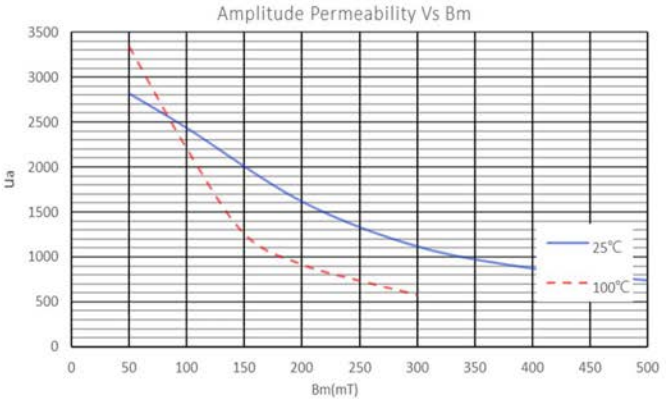












如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

TB2 功率铁氧体材料 (POWER FERRITE MATERIAL TB2)

高矩形比的锰锌铁氧体材料，高矩形比的磁芯能够在较低的磁场下提供相对较高的磁感应强度，这使得它们特别适合于镇流器中的电感器。这种设计可以提高镇流器的效率和性能。镇流器是一种用于稳定电流或电压的电路，通常用于LED驱动器、电源适配器和其他电源应用中。适合的产品形状为DR/DRH/Toroids.

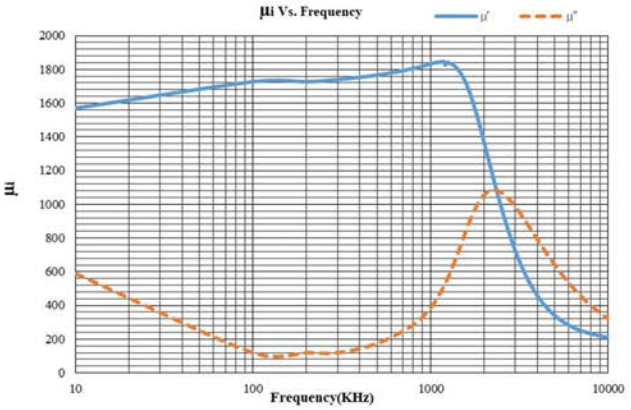
High rectangular ratio manganese-zinc ferrite material refer to cores with a high Br/Bs ratio. These cores can provide relatively high magnetic induction strength at lower magnetic fields, making them particularly suitable for inductors in ballasts. This design enhances the efficiency and performance of the ballast, which is a circuit used to stabilize current or voltage, commonly found in LED drivers, power adapters, and other power supply applications. The suitable product shapes for these applications are DR/DRH/Toroids.

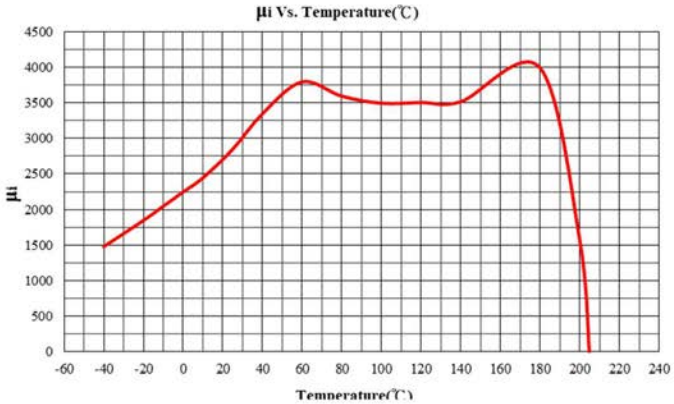
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		1500±25%	
增幅磁導率 u_a Amplitude Permeability	25KHz/400mT	25℃	> 900	
	25KHz/320mT	100℃	> 500	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 100Hz	25℃	580	mT
		100℃	460	
殘留磁通密度 Br Remanence	1200 A/m 100Hz	25℃	420	mT
		100℃	330	
矯頑力 Hc Coercivity	1200 A/m 100Hz	25℃	30	A/m
		100℃	25	
相對損失因子 Loss Factor	100KHz & <0.2mT		< 40	10^{-6}
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>220	℃
密度 D Density	阿基米德法 Archimedes method		4.90	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		>4	Ω-m
功率損耗 Pcv Power Loss	25KHz/200mT	25℃	310	kW/m^3
		100℃	430	
	100KHz/100mT	25℃	440	
		100℃	760	

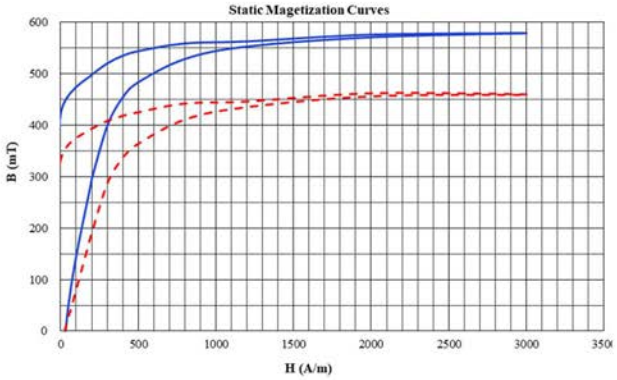
备注:各項数值均為環形磁芯 T31*19*13 測得的典型数值。由于幾何形狀和尺寸的影響，產品規格將與這些数據有所差异。

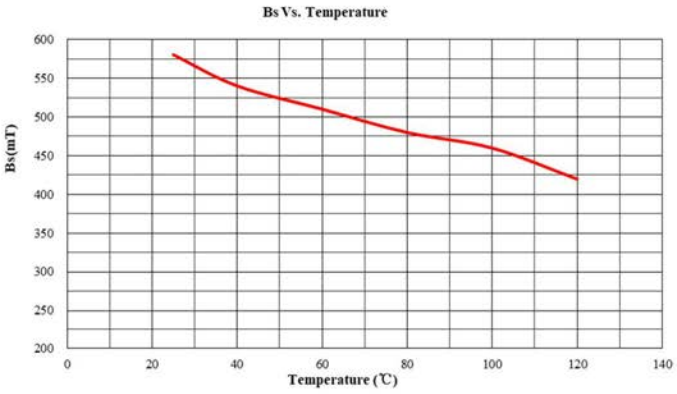
Note：All values are typical values measured for the toroidal magnetic core T31*19*13. Due to the influence of geometric shape and size, the product specifications may differ from these data.

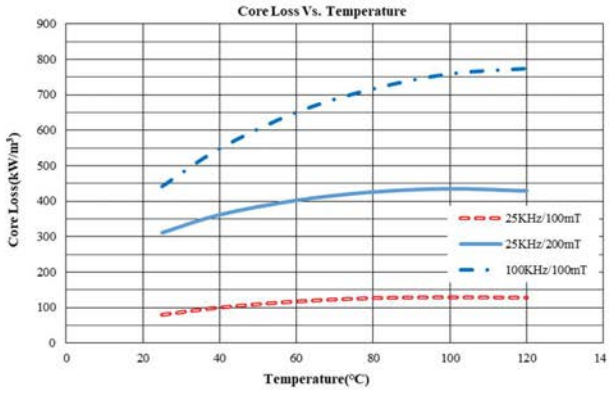
TB2 功率铁氧体材料 (Power Ferrite Material TB2)

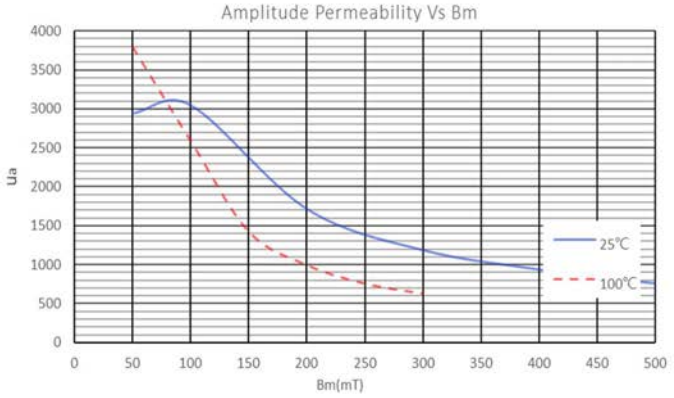












如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

高导磁率铁氧体材料列表 HIGH PERMEABILITY FERRITE MATERIAL LIST

特性 Characteristics	測試條件/單位 Test condition /Unit	溫度 Temp	E02	T05	T07	T10	T12
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT	25℃	2000 ±25%	5000 ±25%	7000 ±25%	10000 ±30%	12000 ±30%
飽和磁通密度 Bs Sturation Flux Density	1200A/M mT	25℃ 100℃	370 210	450 310	420 240	420 240	400 210
殘留磁通密度 Br Remanence	1200A/M mT	25℃ 100℃	270 100	120 90	130 105	70 60	130 110
矯頑力 Hc Coercivity	1200A/M A/M	25℃ 100℃	10 5	10 8	9.6 6	8 6	10 6
相對損失因子 Loss Factor	100KHz & <0.2mT 10^{-6}	25℃	< 30	< 6	< 12	< 15	< 15
磁滞常数 ηB Hysteresis Material Constan	10KHz 1.5-3.0mT 10^{-6}/mT	25℃	2.0	0.3	0.2	0.4	0.5
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT ℃		> 130	> 150	> 140	> 140	> 110
标准化阻抗 Normalized Impendence	150KHz/500mV Ω	25℃	≒2.5	≒3.6	≒8.9	≒11.5	≒12
	300KHz/500mV Ω	25℃	≒5.5	≒7.6	≒17.5	≒20.7	≒18.1
	530KHz/500mV Ω	25℃	≒9.3	≒13.2	≒25.0	≒25.9	≒21.6
	1.8MHz/500mV Ω	25℃	≒23.1	≒39.3	≒30.26	≒23.5	≒15.9
	5.9MHz/500mV Ω	25℃	≒33.1	≒24.8	≒21.6	≒17.1	≒11.6
	6.2MHz/500mV Ω	25℃	≒33.7	≒24.1	≒21.2	≒17.0	
	76MHz/500mV Ω	25℃	≒110				
	108MHz/500mV Ω	25℃	≒130				

NOTES:

所有数值均为从环形磁芯测量中获得的典型数值。由于几何形状和尺寸的影响，产品规格将与这些数据不同。

All values are typical values obtained from toroidal core measurements. Due to the influence of geometric shapes and sizes, product specifications will differ from these data.

E02 高导磁率铁氧体材料 (HIGH PERM. FERRITE MATERIAL E02)

E02 锰锌铁氧体是一种高性能的电磁干扰（EMI）抑制材料，具有2000的初始磁导率，适用于高达500MHz的工作频率。它在高频应用中表现优越，广泛应用于电源滤波器、信号线滤波器、无线通讯设备、计算机和网络设备等领域，适合的产品形状包含T、RH、RU、OT等。

The Mn-Zn Ferrite T02 is a high-performance material designed for electromagnetic interference (EMI) suppression. It features an initial permeability of 2000 and is suitable for operating frequencies up to 500MHz. This ferrite demonstrates exceptional performance in high-frequency applications and is widely used in various fields including power filters, signal line filters, wireless communication devices, computers, and network equipment. Suitable product shapes include T, RH, RU, and OT.

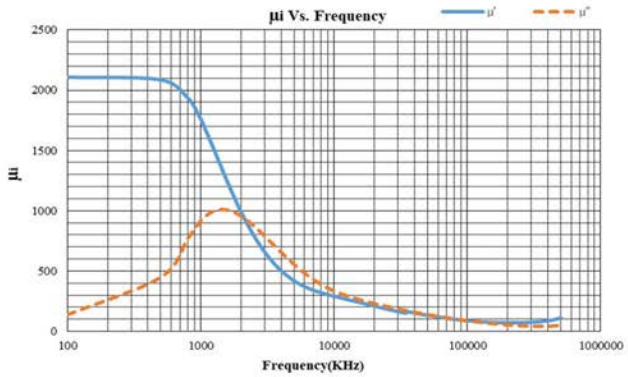
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		2000±25%	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 50Hz	25℃	370	mT
		100℃	210	
殘留磁通密度 Br Remanence	1200 A/m 50Hz	25℃	270	mT
		100℃	100	
矯頑力 Hc Coercivity	1200 A/m 50Hz	25℃	10	A/m
		100℃	5	
相對損失因子 Loss Factor	100KHz		<30	10^{-6}
磁滞常数 η_B Hysteresis Material Constant	10KHz 1.5-3.0mT		2. 0	10^{-6}/mT
温度系数 α_f Temperature Factor of Permeability	100KHz <0.2mT	0-25℃	<7	10^{-6}
		25-70℃	<7	
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>130	℃
密度 D Density	阿基米德法 Archimedes method		4.8	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		3.0	Ω-m

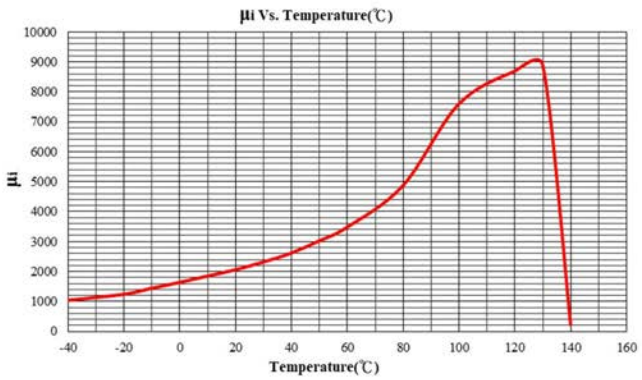
备注:各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

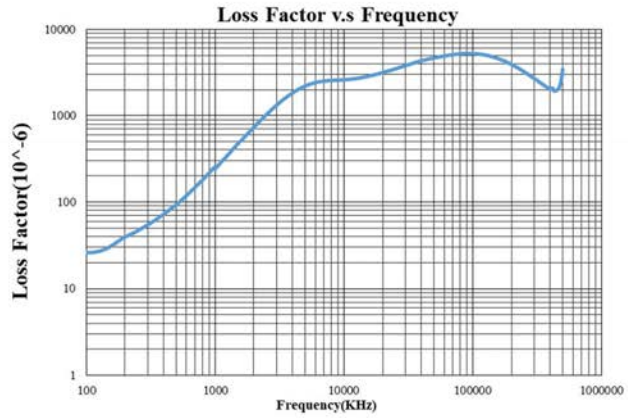
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

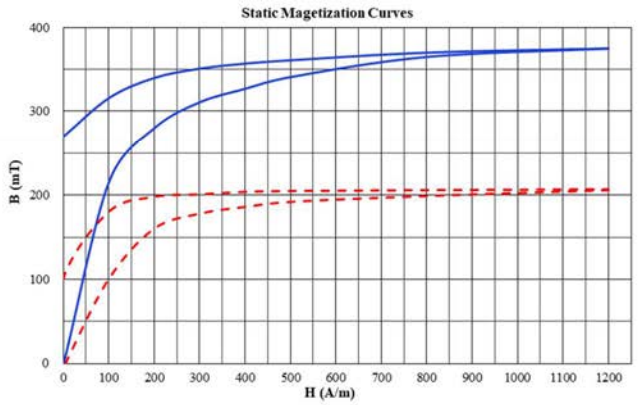
如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

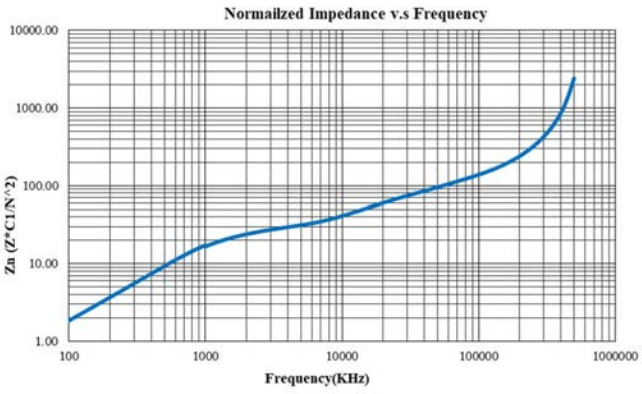
E02 高导磁率铁氧体材料 (High perm. Ferrite Material E02)











T05 高导磁率铁氧体材料 (HIGH PERM. FERRITE MATERIAL T05)

高导磁率的锰锌铁氧体材料既适用于EMI（电磁干扰）滤波器和衰减器等电磁兼容性应用，也可应用于XDSL等高频应用中。在EMI应用中，这种材料有助于抑制电路中的共模噪声；而在XDSL等应用中，通常用于制造线路驱动器和变压器，用于传输数字信号。适合的产品形状可能包括Toroids、OT、UU、EP等。

High permeability manganese-zinc ferrite materials are suitable for both EMI (Electromagnetic Interference) filters and attenuators, as well as high-frequency applications like XDSL. In EMI applications, this material aids in suppressing common-mode noise in circuits. In XDSL applications, it is commonly used in the manufacture of line drivers and transformers for transmitting digital signals. Suitable product shapes may include Toroids, OT, UU, and EP cores.

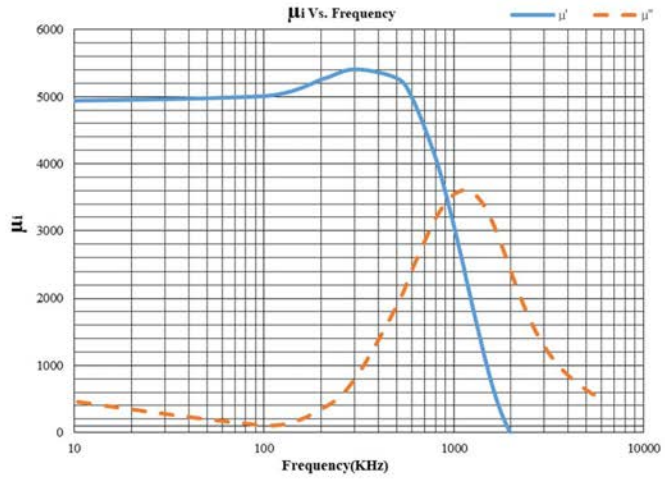
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		5000±25%	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 50Hz	25℃	450	mT
		100℃	310	
殘留磁通密度 Br Remanence	1200 A/m 50Hz	25℃	120	mT
		100℃	90	
矯頑力 Hc Coercivity	1200 A/m 50Hz	25℃	10	A/m
		100℃	8	
相對損失因子 Loss Factor	100KHz		<6	10^{-6}
磁滞常数 η_B Hysteresis Material Constant	10KHz 1.5-3.0mT		0.3	10^{-6}/mT
温度系数 α_f Temperature Factor of Permeability	100KHz <0.2mT	0-25℃	<1.5	10^{-6}
		25-70℃	<0.5	
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>150	℃
密度 D Density	阿基米德法 Archimedes method		4.9	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		1.0	Ω-m

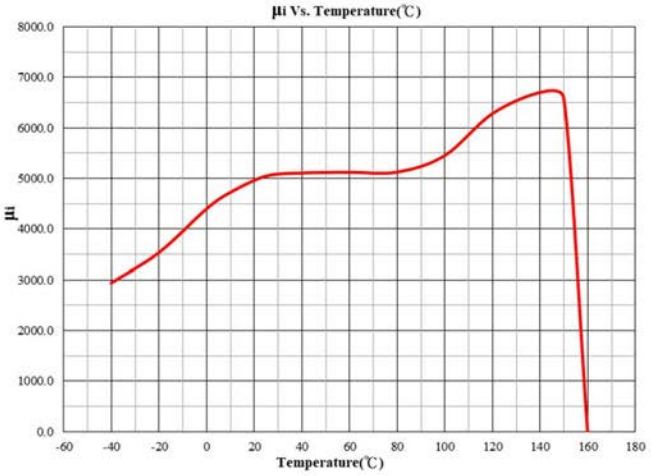
备注:各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

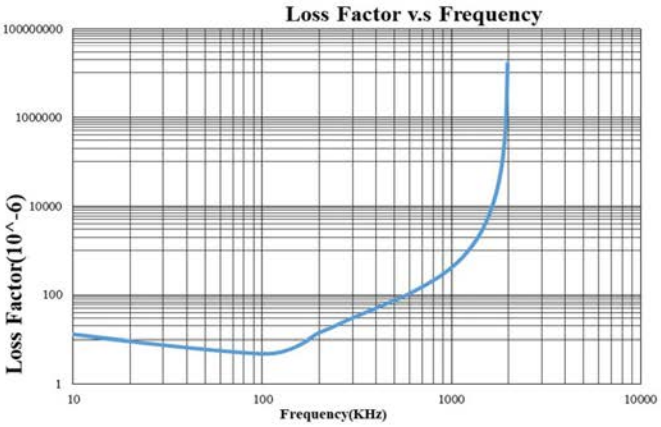
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

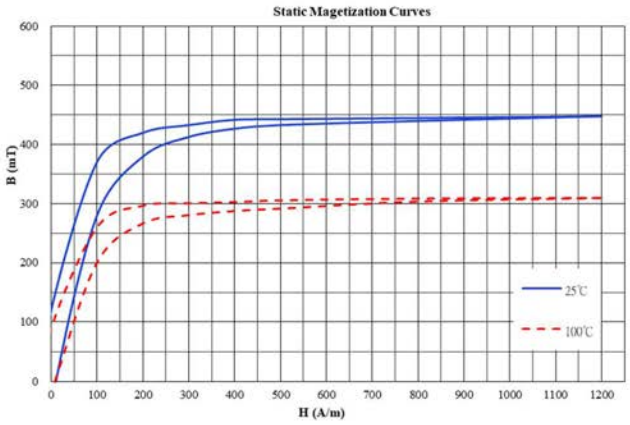
如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

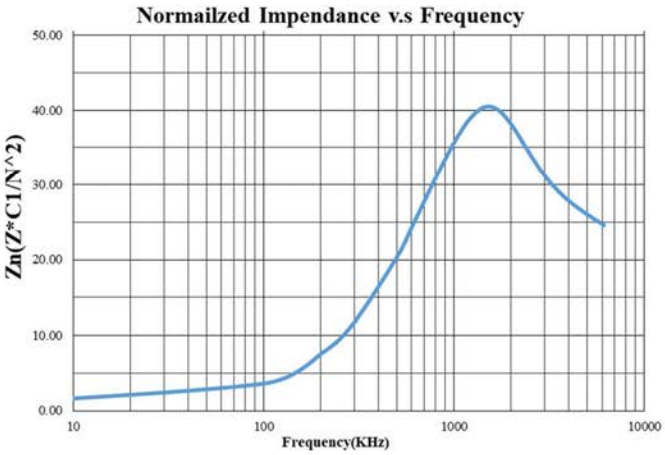
T05 高导磁率铁氧体材料 (High perm. Ferrite Material T05)











T07 高导磁率铁氧体材料 (HIGH PERM. FERRITE MATERIAL T07)

高导磁率的锰锌铁氧体材料既适用于EMI（电磁干扰）滤波器和衰减器等电磁兼容性应用，也可应用于XDSL等高频应用中。在EMI应用中，这种材料有助于抑制电路中的共模噪声；而在XDSL等应用中，通常用于制造线路驱动器和变压器，用于传输数字信号。适合的产品形状可能包括Toroids、OT、UU、EP等。

High permeability manganese-zinc ferrite materials are suitable for both EMI (Electromagnetic Interference) filters and attenuators, as well as high-frequency applications like XDSL. In EMI applications, this material aids in suppressing common-mode noise in circuits. In XDSL applications, it is commonly used in the manufacture of line drivers and transformers for transmitting digital signals. Suitable product shapes may include Toroids, OT, UU, and EP cores.

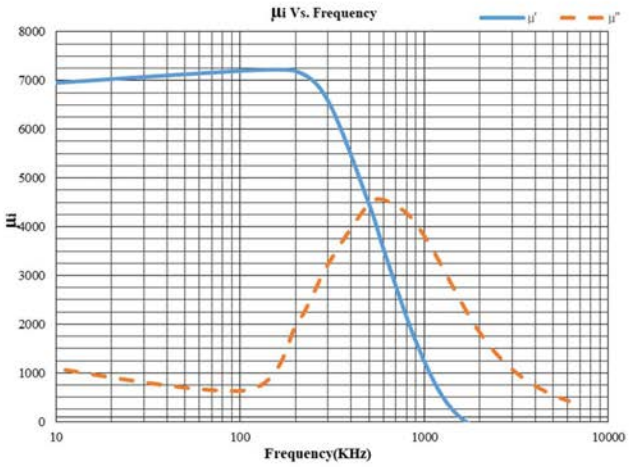
特性 CHARACTERISTICS	测試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		7000±25%	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 50Hz	25℃	420	mT
		100℃	240	
殘留磁通密度 Br Remanence	1200 A/m 50Hz	25℃	130	mT
		100℃	105	
矯頑力 Hc Coercivity	1200 A/m 50Hz	25℃	9.6	A/m
		100℃	6	
相對損失因子 Loss Factor	100KHz		<12	10^{-6}
磁滞常数 η_B Hysteresis Material Constant	100KHz 1.5-3.0mT		0.2	10^{-6}/mT
温度系数 α_f Temperature Factor of Permeability	100KHZ <0.2mT	0-25℃	-0.1~0.5	10^{-6}
		25-70℃	-0.1~0.5	
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>140	℃
密度 D Density	阿基米德法 Archimedes method		4.9	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		0.5	Ω-m

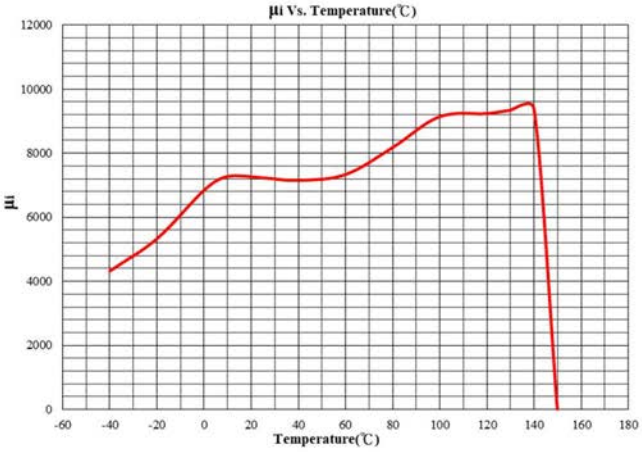
备注:各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

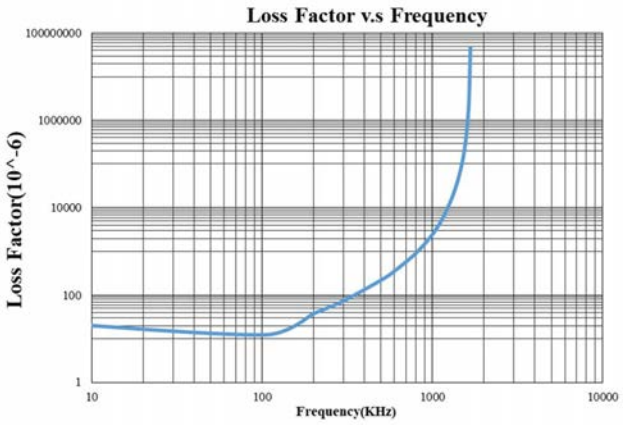
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

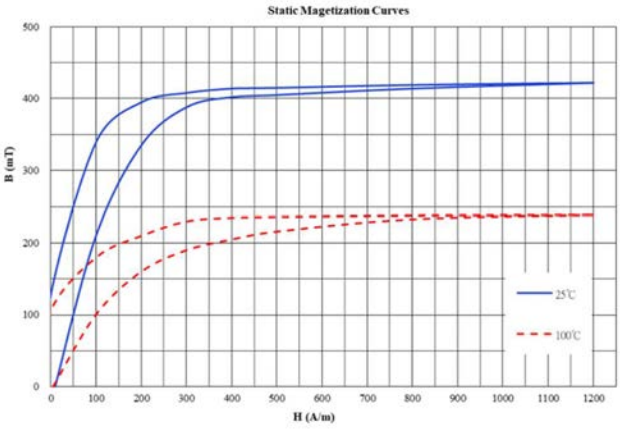
如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

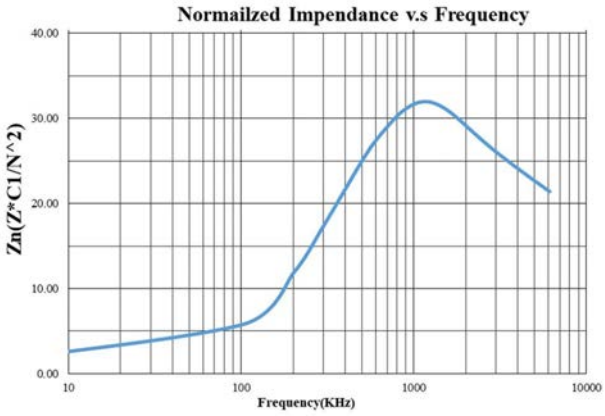
T07 高导磁率铁氧体材料 (High perm. Ferrite Material T07)











T10 高导磁率铁氧体材料 (HIGH PERM. FERRITE MATERIAL T10)

高导磁率的锰锌铁氧体材料既适用于EMI（电磁干扰）滤波器和衰减器等电磁兼容性应用，也可应用于XDSL等高频应用中。在EMI应用中，这种材料有助于抑制电路中的共模噪声；而在XDSL等应用中，通常用于制造线路驱动器和变压器，用于传输数字信号。适合的产品形状可能包括Toroids、OT、UU、EP等。

High permeability manganese-zinc ferrite materials are suitable for both EMI (Electromagnetic Interference) filters and attenuators, as well as high-frequency applications like XDSL. In EMI applications, this material aids in suppressing common-mode noise in circuits. In XDSL applications, it is commonly used in the manufacture of line drivers and transformers for transmitting digital signals. Suitable product shapes may include Toroids, OT, UU , and EP cores.

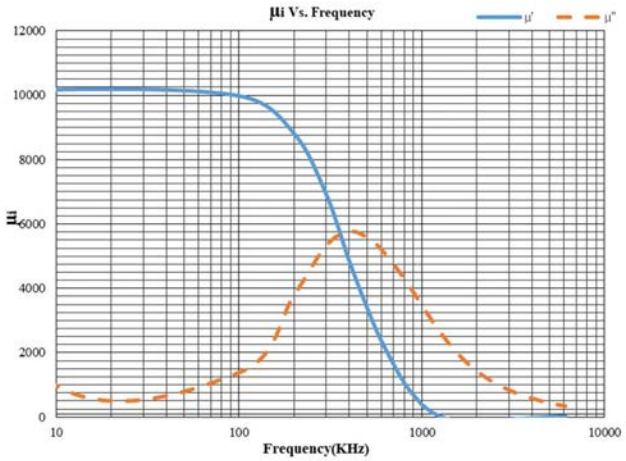
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		10000±30%	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 50Hz	25℃	420	mT
		100℃	240	
殘留磁通密度 Br Remanence	1200 A/m 50Hz	25℃	70	mT
		100℃	60	
矯頑力 Hc Coercivity	1200 A/m 50Hz	25℃	8	A/m
		100℃	6	
相對損失因子 Loss Factor	100KHz		<15	10^{-6}
磁滞常数 η_B Hysteresis Material Constant	100KHz 1.5-3.0mT		0.4	10^{-6}/mT
温度系数 α_f Temperature Factor of Permeability	100KHZ <0.2mT	0-25℃	1~2	10^{-6}
		25-70℃	0.1~1	
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>140	℃
密度 D Density	阿基米德法 Archimedes method		5.0	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		0.2	Ω-m

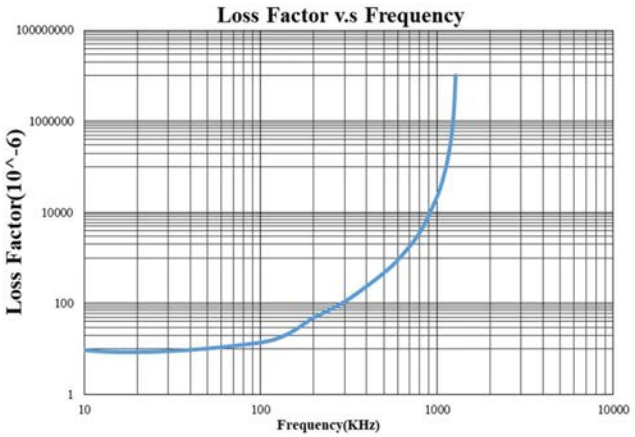
备注:各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

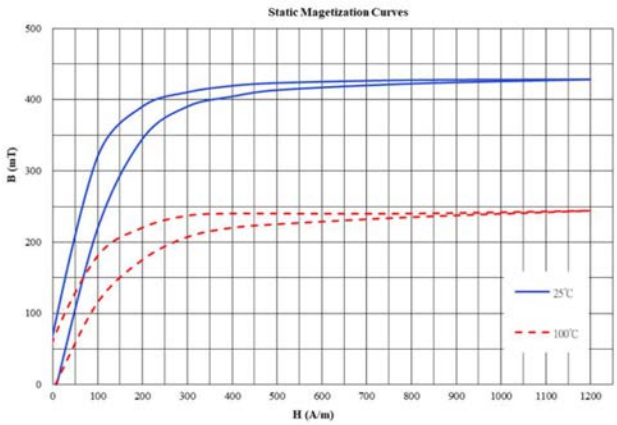
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

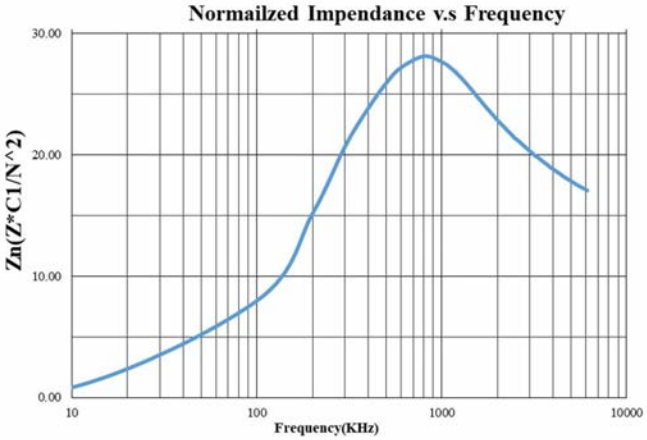
如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

T10 高导磁率铁氧体材料 (High perm. Ferrite Material T10)









T12 高导磁率铁氧体材料 (HIGH PERM. FERRITE MATERIAL T12)

高导磁率的锰锌铁氧体材料既适用于EMI（电磁干扰）滤波器和衰减器等电磁兼容性应用，也可应用于XDSL等高频应用中。在EMI应用中，这种材料有助于抑制电路中的共模噪声；而在XDSL等应用中，通常用于制造线路驱动器和变压器，用于传输数字信号。适合的产品形状可能包括Toroids、OT、UU、EP等。

High permeability manganese-zinc ferrite materials are suitable for both EMI (Electromagnetic Interference) filters and attenuators, as well as high-frequency applications like XDSL. In EMI applications, this material aids in suppressing common-mode noise in circuits. In XDSL applications, it is commonly used in the manufacture of line drivers and transformers for transmitting digital signals. Suitable product shapes may include Toroids, OT, UU, and EP cores.

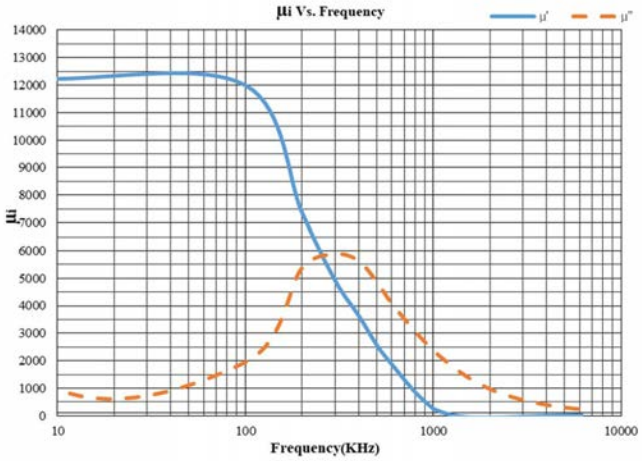
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	单位 UNIT
初始磁導率 ui Initial Permeability	10KHz & <0.2mT		12000±30%	
飽和磁通密度 Bs Saturation Flux Density	1200 A/m 50Hz	25℃	400	mT
		100℃	210	
殘留磁通密度 Br Remanence	1200 A/m 50Hz	25℃	130	mT
		100℃	110	
矯頑力 Hc Coercivity	1200 A/m 50Hz	25℃	10	A/m
		100℃	6	
相對損失因子 Loss Factor	100KHz		<15	10^{-6}
磁滞常数 η_B Hysteresis Material Constant	100KHz 1.5-3.0mT		0.5	10^{-6}/mT
温度系数 αf Temperature Factor of Permeability	100KHZ <0.2mT	0-25℃	0~2.0	10^{-6}
		25-70℃	-0.5~0.5	
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>110	℃
密度 D Density	阿基米德法 Archimedes method		5.0	g/cm^3
表面電阻 ρ Electrical Resistivity	直流电流 DC Current		0.1	Ω-m

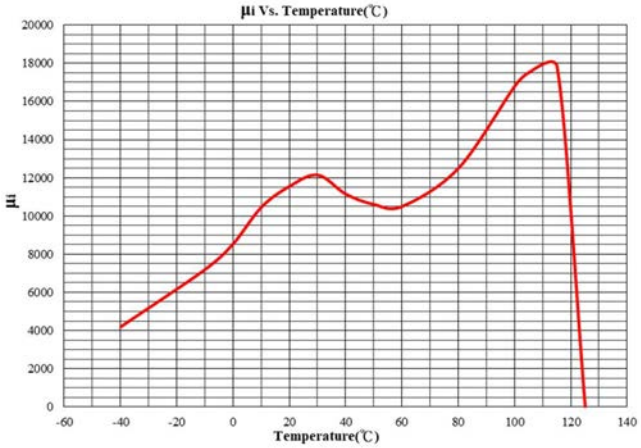
备注:各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差异。

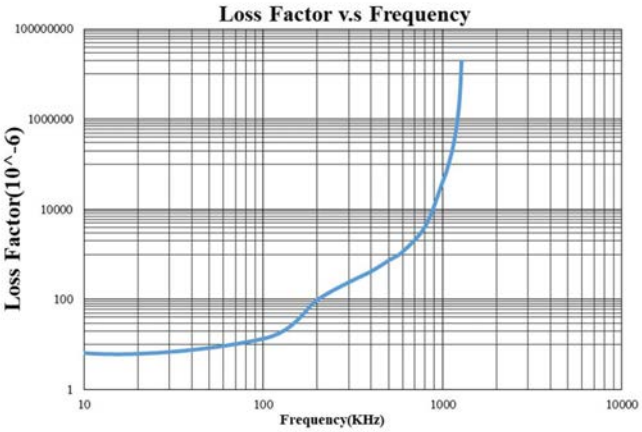
Note：All values are typical values measured for the toroidal magnetic core T25*15*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

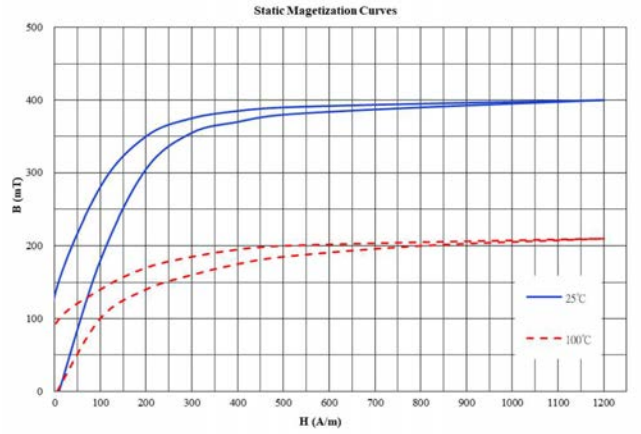
如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

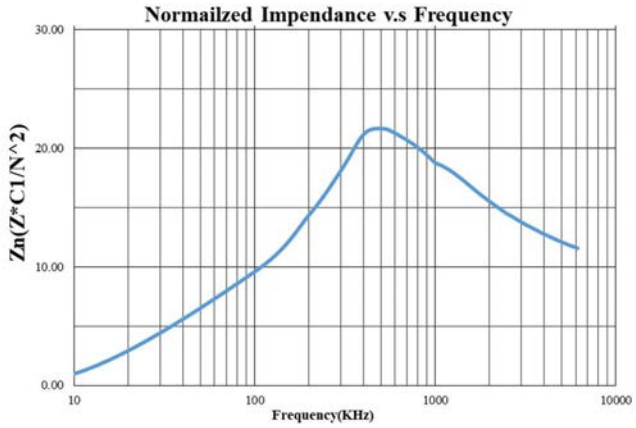
T12 高导磁率铁氧体材料 (High perm. Ferrite Material T12)











铁氧体磁芯的形状选择 THE FACTORS FOR THE SHAPES OF CORES

铁氧体磁芯的形状选择通常受到以下几个因素的影响：

The determining factors for the shapes of ferrite magnetic cores include:

应用要求：不同的应用需要不同形状的磁芯来实现特定的功能。例如，对于变压器，可能会选择EE、EI或ETD形状的磁芯，而对于电感器，可能会选择Pot Core或RM形状的磁芯。

Application Requirements: Different applications require different shapes of magnetic cores to fulfill specific functions. For instance, transformers may utilize EE, EI, or ETD shapes, while inductors might opt for Pot Core or RM shapes.

磁性能需求：不同形状的磁芯具有不同的磁性能特征。一些形状可能更适合于高频应用，而另一些形状可能更适合于低频应用。因此，选择磁芯形状需要考虑到所需的磁性能。

Magnetic Performance Requirements: Various core shapes exhibit different magnetic performance characteristics. Some shapes may be more suitable for high-frequency applications, while others may be better suited for low-frequency applications. Hence, the selection of core shape needs to consider the desired magnetic performance.

成本和制造：磁芯的形状也可能受到成本和制造方面的考虑。某些形状可能更容易制造和加工，从而降低生产成本。

Cost and Manufacturing: Considerations regarding cost and manufacturing may influence the choice of core shape. Certain shapes may be easier to manufacture and process, thus reducing production costs.

尺寸和功率密度：磁芯形状的选择还可能受到尺寸和功率密度的限制。某些形状可能更适合于高功率密度的应用，而另一些形状可能更适合于小型化的应用。

Size and Power Density: The choice of core shape may also be restricted by size and power density considerations. Some shapes may be better suited for high-power-density applications, while others may be more appropriate for miniaturized applications.

电路布局和安装要求：电路的布局和安装要求也可能影响磁芯形状的选择。一些形状可能更易于布局和安装，从而满足特定的设计要求。

Circuit Layout and Installation Requirements: Circuit layout and installation requirements can also impact the selection of core shape. Some shapes may facilitate easier layout and installation, meeting specific design requirements.

Shape of Core /Consideration factor	Pot Core	Double Slab, RM Cores	E Core	EC, ETD, EER Cores	PQ Core	EP Core	Toroid	SRI+ ROD/DR	SP+ ROD/DR
Core Cost 产品成本	high	high	low	medium	high	medium	very low	medium	medium
Bobbin Cost 线桶成本	low	low	low	medium	high	high	none	low	low
Winding Cost 绕线成本	low	low	low	low	low	low	high	low	low
Winding Flexibility 绕线难易度	good	good	excellent	excellent	good	good	fair	excellent	excellent
Assembly 组装难易度	simple	simple	simple	medium	simple	simple	none	medium	medium
Mounting Flexibility 上板难易度	good	good	good	fair	fair	good	poor	good	good
Heat Dissipation 散热难易度	poor	good	excellent	good	good	poor	good	good	poor
Shielding 电磁遮蔽功能	excellent	good	poor	poor	fair	excellent	good	good	excellent

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

快速定制 RAPID CUSTOMIZATION

通过提前准备各种材料的烧结方块，在接收到客户的定制需求后，我们可以跳过传统的模具制作和产品烧结、磨削等工序，使用高精度的雕刻设备去迅速生产所需的测试样品，以便客户进行产品可行性分析。

By pre-preparing sintered blocks of various materials, upon receiving custom requests from clients, we can bypass traditional processes such as mold-making, product sintering, and grinding. Instead, we utilize high-precision carving equipment to swiftly produce the required test samples, facilitating product feasibility analysis for our clients.

欢迎来电咨询相关细节 For further details, please feel free to contact us.

鐵研科技有限公司 TAK Technology Co., Ltd.
地址：桃園市蘆竹區安中街 28 巷 5 號
Address: No. 5, Lane 28, Anzhong Street, Luzhu District, Taoyuan City, Taiwan.
TEL：886-3-2624980 FAX：886-3-2624950
e-mail：taiwan@takferrite.com
東莞鍶研電子有限公司 Dongguan TAK Electronics Co., Ltd.
地址：中國廣東省东莞市石碣镇东风南路 75 号 401 室
ADDRESS：Room 401, No. 75 Dongfeng South Road, Shijie Town, Dongguan City, Guangdong Province, China TEL：86-769-86310390 FAX：86-769-86310396
E-mail：sales6@takferrite.com
河源鐵研科技有限公司 Heyuan TAK Technology Co., Ltd.
地址：中國廣東省河源市連平縣元善鎮石龍工業園區
Address: Shilong Industrial Park, Yuanshan Town, Lianping County, Heyuan City, Guangdong Province, China.
TEL：86-762-4329901 EX.605 FAX：86-762-4329002
E-mail：sales6@takferrite.com

SP　CPU CHOKE SERIES (CPU 系列)

Product Identification 產品識別碼

SP	8.1	X	6	X	8.4	RT
Configuration Symbol 形状符号	Length (A1) 长度		Width (A2) 宽度		Height (D)高度	Auxiliary Symbol 辅助符号

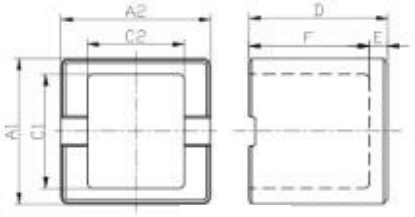


Fig.1

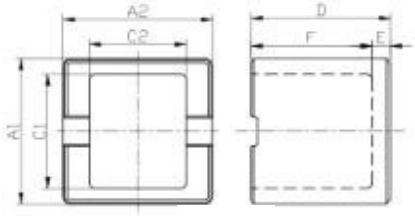


Fig.2

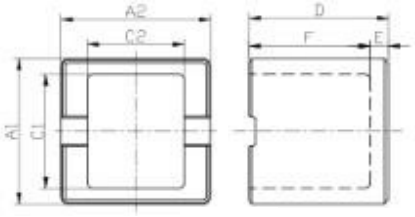


Fig.3

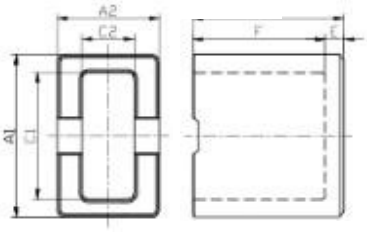


Fig.4

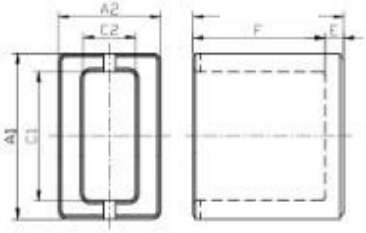


Fig.5

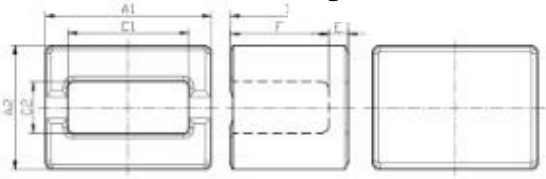


Fig.6

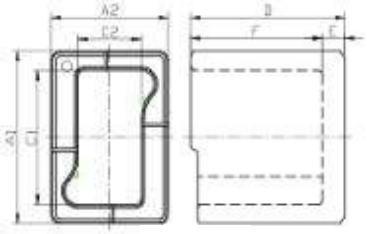


Fig.7

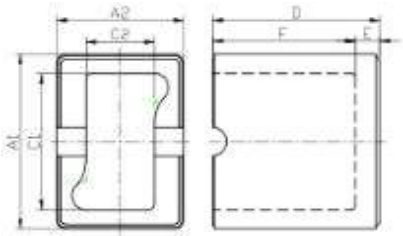


Fig.8

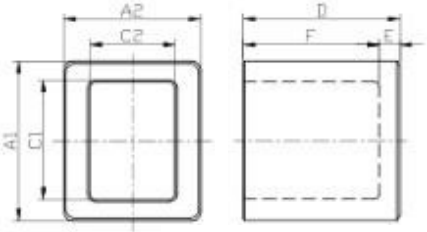


Fig.9

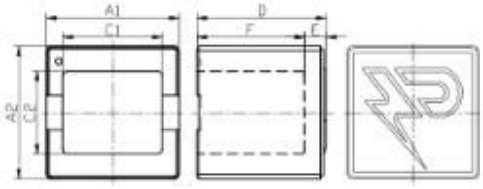


Fig.10

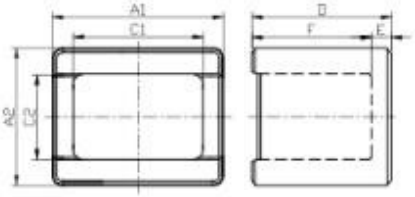


Fig.11

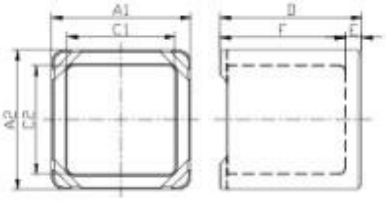


Fig.12

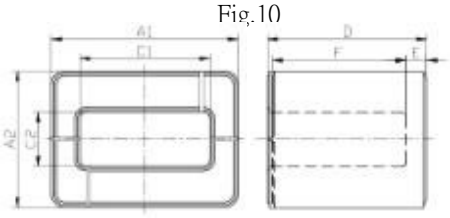


Fig.13

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

P/N & Dimension 品号 & 尺寸	A1	A2	C1	C2	D	E	F	Fig
SP7.8×8.1T	7.80 ±0.15	7.80 ±0.15	4.90 ±0.10	4.50 ±0.10	8.10 ±0.15	1.20 ±0.15	6.90 ±0.15	11
SP8.1×6×8.4TH	8.10 ±0.20	6.00 ±0.20	5.40 ±0.10	2.60 ±0.10	8.40 ±0.20	1.05 MIN	7.20 ±0.15	11
SP8.1×8.8TY	8.10 ±0.15	8.10 ±0.15	6.20 ±0.15	6.20 ±0.15	8.80 ±0.20	1.00 ±0.15	7.80 ±0.15	12
SP8.5×6.8×9	8.50 ±0.15	6.80 ±0.15	5.80 ±0.15	3.70 ±0.10	9.00 ±0.15	1.40 ±0.15	7.60 ±0.15	9
SP8.6×8.6T C6.4	8.60 ±0.20	8.60 ±0.20	6.80 ±0.10	6.40 ±0.10	8.60 ±0.20	1.30 ±0.15	7.10 MIN	1
SP9.3×6.2×10H	9.30 ±0.20	6.20 ±0.20	6.40 ±0.15	2.50 ±0.10	10.00 ±0.15	1.00 MIN	8.50 MIN	11
SP9.5×6.5×9T	9.50 ±0.15	6.50 ±0.15	6.80 ±0.10	3.55 ±0.10	9.00 ±0.15	1.45 ±0.15	7.55 ±0.15	4
SP9.8×5.8×7.5H	9.80 ±0.20	5.80 ±0.15	6.50 ±0.10	2.50 ±0.10	7.50 ±0.20	1.20 ±0.15	6.30 ±0.15	11
SP10×4.8×8.7T	10.00 ±0.20	4.80 ±0.20	7.80 ±0.15	1.80 ±0.10	8.70 ±0.20	1.50 ±0.15	6.20 ±0.15	4
SP10×7×9.2T	10.00 ±0.20	7.00 ±0.20	7.00 ±0.10	2.60 ±0.10	9.20 ±0.15	1.20 MIN	7.55 MIN	11
SP10×7.2×9.9TA	10.00 ±0.15	7.20 ±0.15	7.80 ±0.15	3.90 ±0.10	9.90 +0.20/-0.10	1.10 ±0.15	8.80 ±0.20	8
SP10×7.4×9.9TH	10.00 ±0.15	7.40 ±0.15	7.80 ±0.15	3.90 ±0.10	9.90 +0.20/-0.10	1.10 ±0.15	8.80 ±0.20	7
SP10×8.6×9.6T	10.00 ±0.20	8.60 ±0.20	7.20 ±0.15	5.00 ±0.10	9.60 ±0.20	1.20 MIN	8.20 MIN	11
SP10×9.6T	10.00 ±0.20	10.00 ±0.20	8.0 +0.15/-0.10	6.00 +0.15/-0.10	9.6 ±0.20	1.2 MIN	8.2 MIN	1
SP10×9.6TB	10.00 ±0.20	10.00 ±0.20	8.00 +0.15/-0.10	6.00 ±0.10	9.60 ±0.20	1.20 MIN	8.20 MIN	3
SP10×9.85TA	10.00 ±0.20	10.00 ±0.20	8.00 +0.15/-0.10	6.02 ±0.10	9.85 +0.10/-0.20	1.20 MIN	8.40 MIN	1
SP10.1×9.6T	10.10 ±0.20	10.10 ±0.20	8.10 +0.15/-0.10	6.10 ±0.08	9.60 ±0.20	1.20 MIN	8.20 MIN	1
SP10.1×9.6TA	10.10 ±0.20	10.10 ±0.20	8.10 +0.15/-0.10	6.10 ±0.08	9.60 ±0.20	1.20 MIN	8.20 MIN	3
SP10.1×9.6T-L	10.10 ±0.20	10.10 ±0.20	7.60 +0.15/-0.10	6.30 ±0.10	9.60 ±0.20	1.20 MIN	8.20 MIN	3
SP10.1×9.85T-L	10.10 ±0.20	10.10 ±0.20	7.60 +0.15/-0.10	6.30 ±0.10	9.85 ±0.20	1.40 MIN	8.20 MIN	10
SP10.3×6.5×9.7TA-M	10.30 ±0.20	6.50 ±0.20	8.00 ±0.10	3.30 +0.10/-0.05	9.70 ±0.20	1.20 MIN	8.20 MIN	5

P/N & Dimension 品号 & 尺寸	A1	A2	C1	C2	D	E	F	Fig
SP10.3×6.5×9.7TB-M	10.30 ±0.20	6.50 ±0.20	8.00 ±0.10	3.30 +0.10/-0.05	9.70 ±0.20	1.20 MIN	8.20 MIN	4
SP10.3×7.2×9.5H	10.30 ±0.20	7.20 ±0.20	7.30 ±0.10	2.80 ±0.10	9.50 ±0.15	1.05 MIN	7.50 MIN	11
SP10.5×7.3×9.7T	10.50 ±0.20	7.30 ±0.20	7.35 ±0.15	2.85 ±0.10	9.70 ±0.20	1.40 ±0.15	8.30 ±0.15	11
SP10.6×10.75TY	10.60 ±0.15	10.60 ±0.15	8.20 +0.15/-0.10	8.20 +0.15/-0.10	10.75 ±0.20	1.25 ±0.15	9.50 ±0.15	12
SP10.8×8×9.2T	10.80 ±0.20	8.00 ±0.20	7.95 ±0.15	5.65 ±0.10	9.20 ±0.15	1.20 ±0.10	8.00 ±0.10	2
SP11×8×7.8TG	11.00 ±0.20	8.00 ±0.20	8.00 ±0.15	3.30 +0.10/-0.05	7.80 ±0.05	1.20 MIN	6.35 MIN	6
SP11×8×9.7T	11.00 ±0.20	8.00 ±0.20	8.00 ±0.15	3.30 +0.10/-0.05	9.70 ±0.20	1.20 MIN	8.20 MIN	4
SP11×8×8.2TS	11.00 ±0.20	8.00 ±0.20	8.10 ±0.15	3.50 ±0.10	8.20 ±0.20	1.00 MIN	6.70 MIN	13
SP11.1×9.4×9.85T	11.10 ±0.20	9.40 ±0.20	8.30 ±0.15	6.10 ±0.10	9.85 ±0.15	1.35 ±0.15	8.50 ±0.15	1
SP11.1×9.4×9.85TA	11.10 ±0.20	9.40 ±0.20	8.30 ±0.15	6.10 ±0.10	9.85 ±0.15	1.35 ±0.15	8.50 ±0.15	3
SP11.1×9.1×9.3	11.10 ±0.20	9.10 ±0.20	8.50 ±0.15	6.50 ±0.10	9.30 ±0.15	1.10 ±0.15	8.20 ±0.15	9
SP11.1×9.1×9.3A	11.10 ±0.15	9.10 ±0.15	8.50 ±0.10	6.35 ±0.10	9.30 ±0.15	1.10 ±0.15	8.20 ±0.15	9
SP11.4×8×9.65T	11.40 ±0.15	11.40 ±0.15	8.00 ±0.15	7.85 ±0.10	9.65 ±0.20	1.10 MIN	8.25 MIN	1
SP12.2×11.5TY	12.20 ±0.15	12.20 ±0.15	9.30 ±0.15	9.30 ±0.15	11.50 ±0.20	1.50 ±0.15	10.00 ±0.15	12
SP13.5×13.2×10.5T	13.50 ±0.20	13.20 ±0.20	10.60 ±0.20	8.7 +0.20/-0.10	10.50 ±0.20	1.20 MIN	9.00 MIN	1

Note:

- This table only shows common product numbers. If the SP core you need is not listed in the above table, please do not hesitate to contact us.
- SP CORE can be combined with R CORE/I BAR/DR CORE according to customer requirements to achieve different electrical characteristics.

备注

- 此表仅展示常见品号，若您需要的 SP core未標明在上表中，請不吝賜電詢問敝司業務人員。
- SP CORE可根据客户需求，搭配 R CORE/I BAR/DR CORE 达成不同的电性特气要求。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

SRI　CPU CHOKE SERIES (CPU 系列)

Product Identification 產品識別碼

SRI	6.8	X	5.2	X	3.3	RT
Configuration Symbol 形状符号	Length (A1) 长度		Width (C1) 宽度		Height (D)高度	Auxiliary Symbol 辅助符号

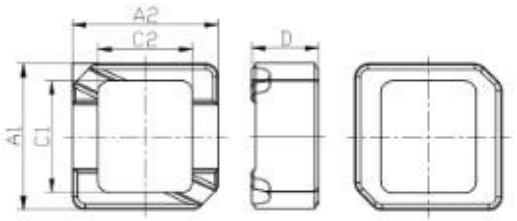


Fig.1

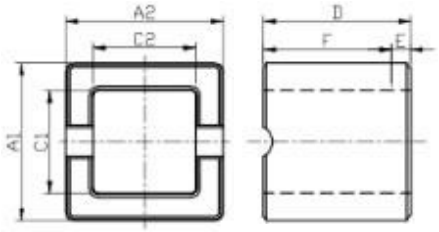


Fig.2

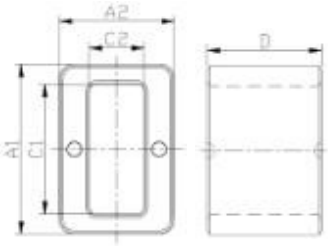


Fig.3

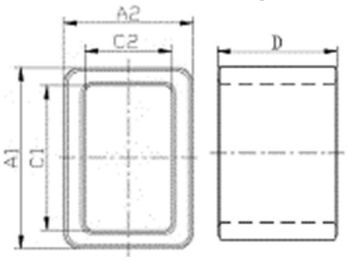


Fig.4

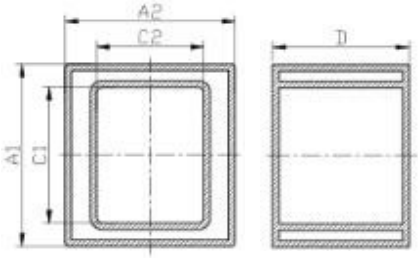


Fig.5

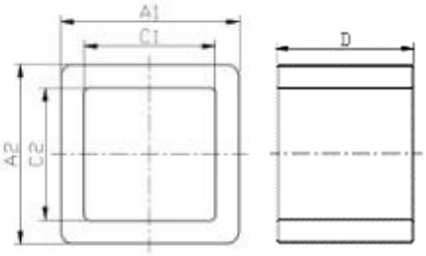


Fig.6

P/N & Dimension 品号 & 尺寸	A1	A2	C1	C2	D	Fig
SRI 6.8×5.2×3.3RT	6.80 ±0.15	6.80 ±0.15	5.20 ±0.15	4.40 ±0.10	3.30 ±0.10	1
SRI 11×7.6×7.5M	11.00 ±0.20	11.00 ±0.20	7.60 ±0.15	7.60 ±0.15	7.50 ±0.20	2
SRI 11×7.6×9.5M	11.00 ±0.20	11.00 ±0.20	7.60 ±0.15	7.60 ±0.15	9.50 ±0.20	2
SRI 11.5×8×7.9	11.50 ±0.20	8.00 ±0.20	8.80 ±0.15	3.80 ±0.15	7.90 ±0.15	3
SRI 11.5×8.2×7.9	11.50 ±0.20	8.20 ±0.20	9.20 ±0.15	5.50 +0.20/-0	7.90 ±0.15	4
SRI 11.55×10.8×7.8	11.55 ±0.15	10.80 ±0.15	8.20 ±0.15	6.80 ±0.15	7.80 ±0.15	3
SRI 11.6×10.8×8.1	11.55 ±0.15	10.80 ±0.15	8.60 +0.15/-0.05	6.80 +0.15/-0.05	8.10 ±0.15	3

P/N & Dimension 品号 & 尺寸	A1	A2	C1	C2	D	Fig
SRI 13×9.4×9.5C	13.00 ±0.30	12.00 ±0.30	9.50 ±0.20	8.60 ±0.20	9.60 +0.40/-0.20	5
SRI 15×11×10.8	15.00 ±0.25	15.00 ±0.25	11.00 ±0.20	11.00 ±0.20	10.80 ±0.20	6
SRI 15×11×15	15.00 ±0.25	15.00 ±0.25	11.00 ±0.20	11.00 ±0.20	15.00 ±0.25	6

Note:

- This table only shows common product numbers. If the SRI core you need is not listed in the above table, please do not hesitate to contact us.
- SRI CORE can be combined with R CORE/I BAR/DR CORE according to customer requirements to achieve different electrical characteristics.

备注

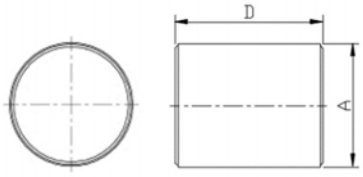
- 此表仅展示常见品号，若您需要的 SRI core未標明在上表中，請不吝賜電詢問敝司業務人員。
- SRI CORE可根据客户需求，搭配 R CORE/I BAR/DR CORE 达成不同的电性特气要求。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

R SERIES (ROD 系列)

Product Identification 產品識別碼

R	3	X	5.15	G
Configuration Symbol 形状符号	Length (A) 长度		Height (D)高度	Auxiliary Symbol 辅助符号



P/N & Dimension 品号 & 尺寸	A	D		P/N & Dimension 品号 & 尺寸	A	D
R3×5.15G	3.00±0.10	5.15±0.05		R5.5×6.8G	5.50±0.10	6.80±0.10
R3.5×3.9G	3.50±0.10	3.90±0.10		R5.8×7.65G	5.80±0.10	7.65±0.10
R4×5.1G	4.00±0.10	5.10±0.10		R6×7.35G	6.00±0.10	7.35±0.10
R4.3×4.05G	4.30±0.10	4.05±0.10		R6.1×7G	6.10±0.10	7.00±0.10
4.4×7.3G	4.40±0.10	7.30±0.10		R6.3×9.2G	6.30±0.10	9.20±0.10
R4.5×4.25G	4.50±0.10	4.25±0.10		R6.35×6.5G	6.35±0.10	6.50±0.10
R4.7×5.45G	4.70±0.10	5.45±0.10		R6.4×6.35G	6.40±0.10	6.35±0.10
R4.8×3.9G	4.80±0.10	3.90±0.10		R7×7.2G	7.00±0.10	7.20±0.10
R4.9×6.4G	4.90±0.10	6.40±0.10		R7.5×7.9G	7.50±0.10	7.90±0.10
R5×4.15G	5.00±0.10	4.15±0.10		R7.9×8.9G	7.90±0.10	8.90±0.10
R5.2×7.15G	5.20±0.10	7.15±0.10		R8×8.15G	8.00±0.10	8.15±0.10
R5.3×7.1G	5.30±0.10	7.10±0.10		R8.38×6.6G	8.38±0.10	6.60±0.10
R5.4×5.58G	5.40±0.10	5.58±0.10		R6.2×23.5	6.20±0.15	23.50±0.50
R1×4	1.00±0.10	4.00±0.10		R6.35×21	6.35±0.15	21.00±0.50
R1.2×4.2	1.20±0.10	4.20±0.10		R6.43×13.6	6.43±0.15	13.60±0.30

P/N & Dimension 品号 & 尺寸	A	D	P/N & Dimension 品号 & 尺寸	A	D
R1.4×4.3	1.40±0.10	4.30±0.10	R6.5×30	6.50±0.15	30.00±0.60
R1.55×12	1.55±0.10	12.00±0.30	R7×20	7.00±0.15	20.00±0.40
R2×10	2.00±0.15	10.00±0.20	R7×40	7.00±0.15	40.00±0.80
R2.9×12	2.90±0.15	12.00±0.30	R7.9×15	7.90±0.20	15.00±0.30
R3×8	3.00±0.15	8.00±0.15	R8×40	8.00±0.20	40.00±0.80
R3×25	3.00±0.15	25.00±0.50	R8.8×30	8.80±0.20	30.00±0.60
R3.17×12	3.17±0.15	12.00±0.30	R9.35×25	9.35±0.20	25.00±0.50
R3.5×15	3.50±0.15	15.00±0.30	R9.5×38.8	9.50±0.20	38.80±0.80
R3.85×14	3.85±0.15	14.00±0.30	R9.8×25	9.80±0.20	25.00±0.50
R4×15	4.00±0.15	15.00±0.30	R10×40	10.00±0.20	40.00±0.80
R4×40	4.00±0.15	40.00±0.80	R11×37	11.00±0.20	37.00±0.75
R4.1×20	4.10±0.15	20.00±0.40	R12×40	12.00±0.25	40.00±0.80
R5×15	5.00±0.15	15.00±0.30	R14.2×15	14.20±0.20	15.00±0.30
R5×30	5.00±0.15	30.00±0.60	R15×33.3	15.00±0.30	33.30±0.65
R5.5×8	5.00±0.15	8.00±0.20	R16×18	16.00±0.35	18.00±0.35
R6×15	6.00±0.15	15.00±0.30	R21.0×35	21.00±0.40	35.00±0.70

Note:

- This table only shows common product numbers. If the Rod core you need is not listed in the above table, please do not hesitate to contact us.
- Rod CORE can be used alone for sensor types such as antennas, or can be combined with SP/SRI CORE to achieve different electrical characteristics according to customer needs.

备注:

- 此表仅展示常见品号，若您需要的 Rod core未標明在上表中，請不吝賜電詢問敝司業務人員。
- Rod CORE可单独使用于天线等传感类型产品，也可根据客户需求，搭配 SP/SRI CORE 达成不同的电性特气要求。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

AR/I　CHOKE SERIES (AR/I 系列)

Product Identification 產品識別碼

AR	5	X	4.2	X	4.3	G
Configuration Symbol 形状符号	Length (A1)外径		Width (A2)外径		Height (D)高度	Auxiliary Symbol 辅助符号

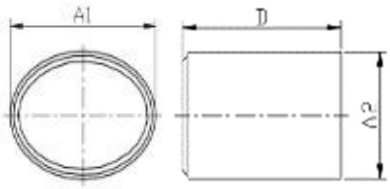


Fig.1

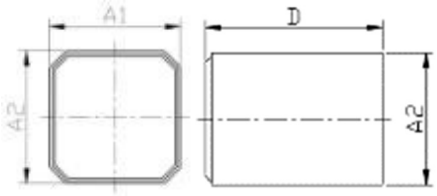


Fig.2

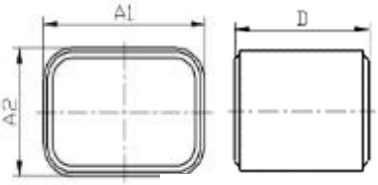


Fig.3

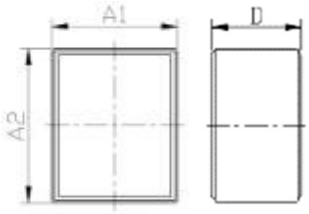


Fig.4

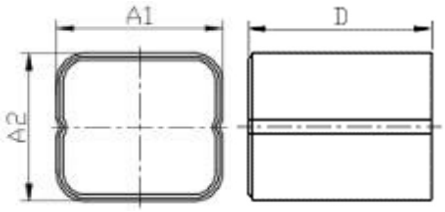


Fig.5

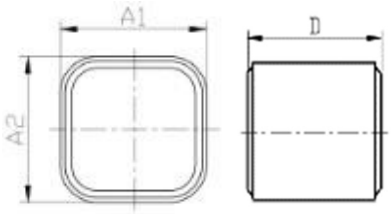


Fig.6

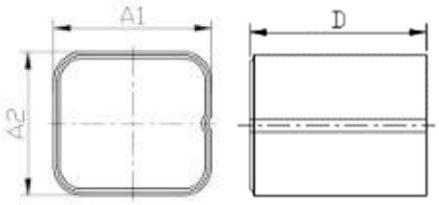


Fig.6

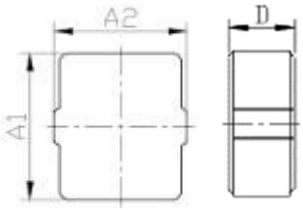


Fig.7

P/N & Dimension 品号 & 尺寸	A1	A2	D	Fig
AR 5×4.2×4.3G	5.00±0.10	4.20±0.10	4.30±0.05	1
AR 5.7×5.3×6.1G	5.70±0.10	5.30±0.10	6.10±0.05	1
I 4.5×4.5×4.95	4.50±0.10	4.50±0.10	4.95±0.10	2
I .6×3.2×3.43	4.60+0.05/-0.15	3.20+0.05/-0.15	3.43±0.10	3
I 4.6×4.6×5.95	4.60±0.10	4.60±0.10	5.95±0.10	2
I 4.8×3.8×2.95	4.80±0.10	3.80±0.10	2.95±0.10	3

P/N & Dimension 品号 & 尺寸	A1	A2	D	Fig
I 4.8×4.8×2.85	4.80±0.10	4.80±0.10	2.85±0.10	2
I 4.9×6×3.5	4.90±0.10	6.00±0.15	3.50±0.10	4
I 5×3×6.5	5.00±0.10	3.00±0.10	6.50±0.10	3
I 5×3.6×6.35	5.00±0.10	3.60±0.10	6.62±0.15	3
I 5×3.6×6.9	5.00±0.10	3.60±0.10	6.90±0.10	3
I 5×4.5×1.62	5.00±0.10	4.50±0.10	1.62±0.10	2
I 5×5×4.83	5.00±0.10	5.00±0.10	4.83±0.10	6
I 5.2×4×2.9	5.20±0.10	4.00±0.10	2.90±0.10	3
I 5.3×4.5×3.6G	5.30±0.10	4.50±0.10	3.60±0.10	5
I 5.3×5.3×4.2	5.30±0.10	5.30±0.10	4.20±0.10	6
I 5.4×5.4×2.55	5.40±0.10	5.40±0.10	2.55±0.10	2
I 5.5×4.5×3.6	5.50±0.10	4.50±0.10	3.60±0.10	7
I 5.5×5×6	5.50±0.10	5.00±0.10	6.00±0.10	5
I 5.5×5.5×5.83	5.50±0.10	5.50±0.10	5.83±0.10	6
I 5.8×2.7×7.2	5.80±0.10	2.70±0.10	7.20±0.10	2
I 5.8×4.5×2.45	5.80±0.10	4.80±0.10	2.45±0.10	3
I 6×4×2.5	6.00±0.10	4.00±0.10	2.50±0.10	2
I 6×5.4×2.4	6.00±0.10	5.40±0.10	2.40±0.10	3
I 6.3×7.5×7.55	7.50±0.10	6.30±0.10	7.55±0.10	3
I 6.4×5.7×2.48	6.40±0.10	5.70±0.10	2.48±0.10	8

P/N & Dimension 品号 & 尺寸	A1	A2	D	Fig
I 6.6×4.4×2.4	6.60±0.10	4.40±0.10	2.40±0.10	2
I 6.6×4.6×3.35	6.60±0.10	4.60±0.10	3.35±0.10	3
I 6.7×3.5×6.8	6.70±0.10	3.50±0.10	6.80±0.10	2
I 6×7.8×7.5	7.80±0.10	6.00±0.10	7.50±0.10	3
I 7.8×3.8×8.2	7.80±0.10	3.80±0.10	8.20±0.10	2
I 7.8×3.8×8.4	7.80±0.10	3.80±0.10	8.40±0.10	2

Note:

- This table only shows common product numbers. If the AR/I core you need is not listed in the above table, please do not hesitate to contact us.
- AR/I CORE can be used alone for sensor types such as antennas, or can be combined with SP/SRI CORE to achieve different electrical characteristics according to customer needs.

备注:

- 此表仅展示常见品号，若您需要的 AR/I core未標明在上表中，請不吝賜電詢問敝司業務人員。
- AR/I CORE可单独使用于天线等传感类型产品，也可根据客户需求，搭配 SP/SRI CORE 达成不同的电性特气要求。

SB CHOKE SERIES (SB 系列)

Product Identification 產品識別碼

SB	4.8	X	4.8	X	2.25	G
Configuration Symbol 形状符号	Length (A) 长度		Width (D) 宽度		Height (B)高度	Auxiliary Symbol 辅助符号

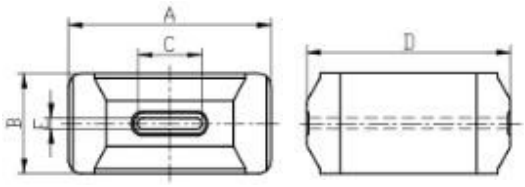


Fig.1

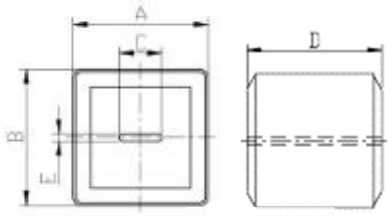


Fig.2

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	Le	Ae	Fig
SB4.8x4.8x2.25G	4.80+0.05/-0.10	2.25 TYP.	1.50±0.05	4.80+0.05/-0.10	0.25±0.05	7.48	1.74	1
SB4.8x4.8x2.85G	4.80+0.05/-0.10	2.85±0.05	1.50±0.05	4.80+0.05/-0.10	0.25±0.05	8.09	2.11	1
SB4.8x4.8x2.88G	4.80+0.05/-0.10	2.88±0.05	1.50±0.05	4.80+0.05/-0.10	0.25±0.05	8.12	2.13	1
SB4.8x4.8x5G	4.80+0.05/-0.10	5.00±0.10	1.50±0.05	4.80+0.05/-0.10	0.25±0.05	9.74	3.1	2
SB4.8x4.8x5.35G	4.80+0.05/-0.10	5.35±0.07	1.20±0.05	4.80+0.05/-0.10	0.50±0.05	9.97	2.55	2
SB4.8x4.8x5.53G	4.80+0.05/-0.10	5.53±0.07	1.20±0.05	4.80+0.05/-0.10	0.50±0.05	10.09	2.6	2
SB4.8x4.8x5.63G	4.80+0.05/-0.10	5.63±0.07	1.50±0.05	4.80+0.05/-0.10	0.25±0.05	10.16	3.34	2
SB5x5x5.55G	5.00±0.10	5.55±0.10	1.20±0.05	5.00±0.10	0.25±0.05	9.98	2.78	2
SB5.13x3x5.1G	5.13±0.10	3.00±0.05	1.83±0.05	5.10±0.10	0.25±0.05	8.89	2.66	1
SB5.2x3.5x4.15G	4.15±0.05	5.20±0.10	1.20±0.05	3.50±0.10	0.50±0.05	9.24	2.29	2

Unit: mm

Note:

- This table only shows common product numbers. If the SB core you need is not listed in the above table, please do not hesitate to contact us.
- SB core can have the Gap process for electrical adjustment, the minimum gap is 0.1mm.

备注:

- 此表仅展示常见品号，若您需要的 SB core未標明在上表中，請不吝賜電詢問敝司業務人員。
- SB core 可增加Gap制程进行电性的调整，GAP尺寸最小可达到0.1mm。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

UI SMD SERIES (UI 系列)

Product Identification 產品識別碼

U	3.7	X	3.7	X	2.1
Configuration Symbol 形状符号	Length (A) 长度		Width (D) 宽度		Height (B)高度

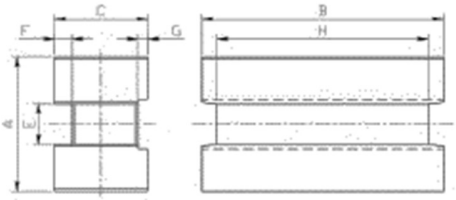


Fig.1

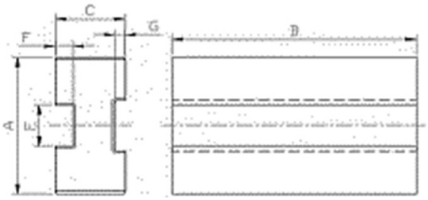


Fig.2

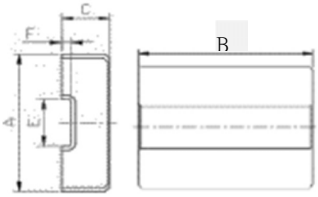


Fig.3

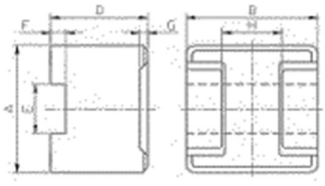


Fig.4

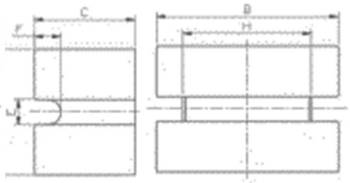


Fig.5

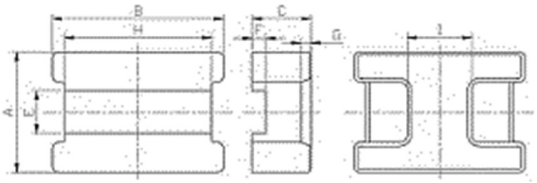


Fig.6

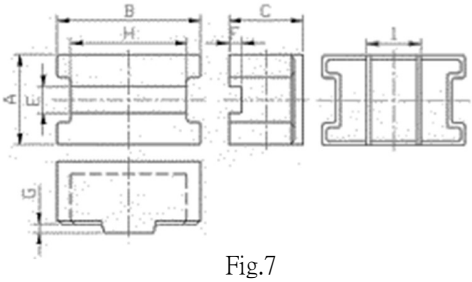


Fig.7

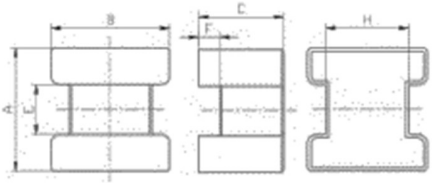


Fig.8

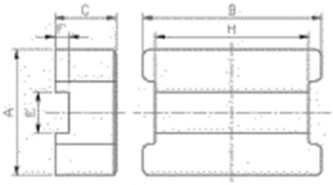


Fig.9

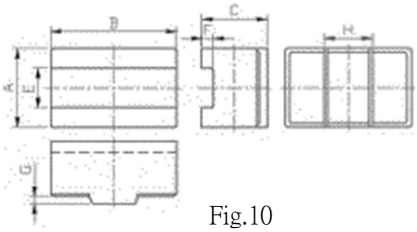


Fig.10

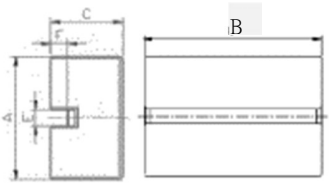


Fig.11

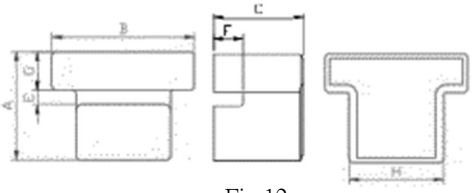


Fig.12

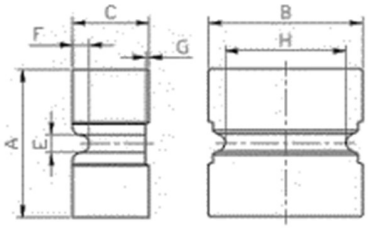


Fig.13

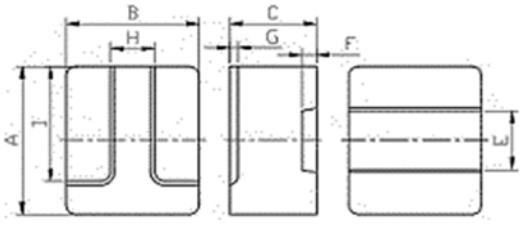


Fig.14

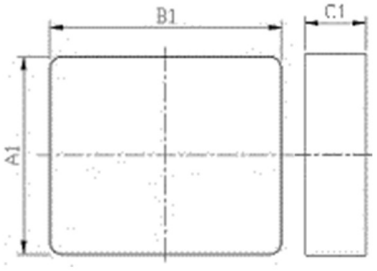


Fig.15

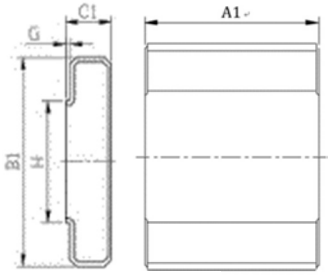


Fig.16

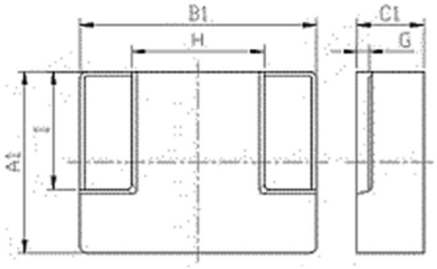


Fig.17

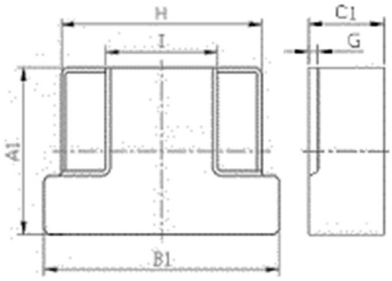


Fig.18

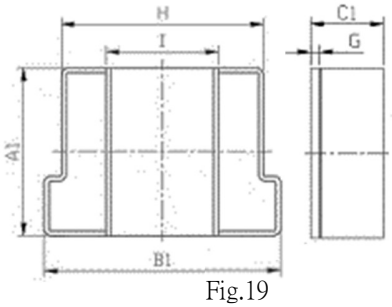


Fig.19

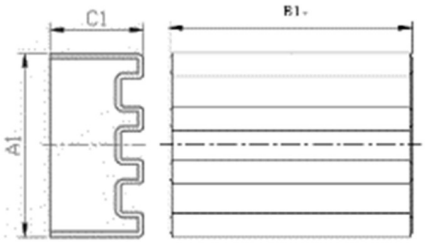


Fig.20

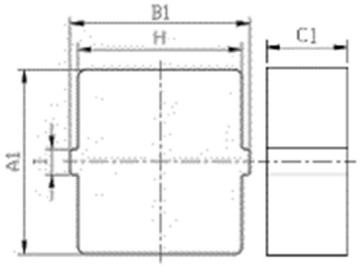


Fig.21

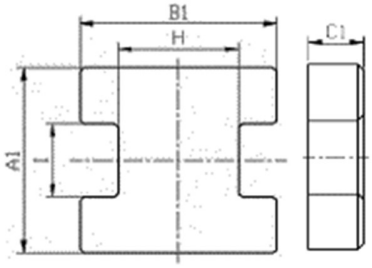


Fig.22

P/N & Dimension 品号 & 尺寸	A/A1	B/B1	C	C1	E	F	G	H	I	Fig
U3.7×3.7×2.1 I 3.7×3.7×1.4	3.70 ±0.10	3.70 ±0.10	2.10 ±0.10	1.40 ±0.10	1.60 ±0.10	0.40 ±0.10	0.10 ±0.08	3.00 ±0.10	1.40 ±0.10	6&15
U3.7×3.7×2.4-S I 3.7×3.7×1.25-S	3.70 ±0.10	3.70 ±0.10	2.40 ±0.10	1.25 ±0.08	1.10 ±0.08	0.55 ±0.10	0.30 ±0.08	3.00 ±0.10	0.95 REF	6&15
U3.7×3.7×2.6 I 3.7×3.7×1.4A	3.70 ±0.10	3.70 ±0.10	2.60 ±0.10	1.40 ±0.10	1.50 ±0.10	0.70 ±0.10				8&15
U3.76×3.76×1.88 I 3.76×3.76×1.6	3.76 ±0.10	3.76 ±0.10	1.88 ±0.10	1.60 ±0.10	1.37 ±0.10	0.51 ±0.08	0.23 ±0.08	2.94 ±0.10	1.20 ±0.10	3&18
U3.8×3.3×1.9 I 3.8×3.3×1.8	3.80 ±0.10	3.30 ±0.10	1.90 ±0.10	1.80 ±0.10	1.50 ±0.10	0.35 ±0.10	0.18 ±0.10	1.10 REF	2.60 ±0.10	3&17
U3.8×3.3×2.15T I 3.8×3.3×1.6	3.80 ±0.10	3.30 ±0.10	2.15 ±0.10	1.60 ±0.10	1.50 ±0.10	0.35 ±0.10	0.18 ±0.10	1.10 REF	2.70 ±0.15	14&15
U3.8×3.7×1.7 I 3.8×3.7×1.82	3.80 ±0.10	3.70 ±0.10	1.70±0.08 1.82±0.08		1.50 ±0.10	0.30±0.08 0.20±0.08	0.15 ±0.08	3.20 ±0.10	1.25 ±0.10	3&6

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

P/N & Dimension 品号 & 尺寸	A/A1	B/B1	C	C1	E	F	G	H	I	Fig
U3.8×3.8×2.1 I 3.8×3.8×1.4	3.80 ±0.10	3.80 ±0.10	2.10 ±0.08	1.40 ±0.08	1.60 ±0.10	0.40 ±0.08	0.10 ±0.08	3.00 ±0.10	1.40 ±0.10	6&15
U4×4×2 I 4×4×1.7T	4.00 ±0.10	4.00 ±0.10	2.00 ±0.10	1.70 ±0.10	1.45 +0.10/-0	0.50 ±0.08	0.24 ±0.05	3.46 REF	(I)H:1.45 +0.10/-0	1&16
U4.15×4.15×3.6 I 4.15×4.15×2	4.15 ±0.10	4.15 ±0.10	3.60 ±0.10	2.00 ±0.08	1.65 ±0.10	0.55 ±0.08	0.35 ±0.08	3.25 ±0.10		1&15
U4.57×3.1×1.88 I 4.57×3.1×1.57	4.57 ±0.10	3.10 ±0.08	1.88 ±0.05	1.57 ±0.05	1.66 ±0.05	0.51 ±0.05	0.25 +0/-0.10	1.22 ±0.13		3&16
U4.9×4.9×4 I 4.9×4.9×2A	4.90 ±0.10	4.90 ±0.10	4.00 ±0.08	2.00 ±0.08	1.00 ±0.10	1.00 ±0.10		3.50 ±0.10		9&15
U5.31×5.13×2.01 I 5.31×5.13×1.96	5.31 ±0.10	5.13 ±0.10	2.01 ±0.05	1.96 ±0.08	1.83 ±0.05	0.64 ±0.05	0.26 ±0.05	4.06 ±0.13	1.78 ±0.13	3&19
U5.4×4.3×2.5 I 5.4×4.3×1.6	5.40 ±0.10	4.30 ±0.10	2.50 ±0.07	1.60 ±0.05	2.20 ±0.07	0.60 ±0.07	0.30 ±0.07			2&15
U5.6×5.6×2.9 I 5.6×5.6×2	5.60±0.15 5.65±0.15	5.65±0.15 5.60±0.15	4.95 ±0.10	2.00 ±0.10	2.00 ±0.10	0.60 ±0.10	0.25 ±0.10	4.95 ±0.10	1.80 ±0.10	1&16
U5.7×5.7×4.25 I 5.7×5.7×2	5.70 ±0.15	5.70 ±0.15	4.25 ±0.10	2.00 ±0.10	2.20 ±0.10	0.70 ±0.10	0.35 ±0.05	2.60 REF		4&15
U5.8×5.8×4 I 5.8×5.8×2.3	5.80 ±0.10	5.80 ±0.10	4.00 ±0.10	2.30 ±0.10	2.35 ±0.10	1.00 ±0.10				8&15
U6×10.3×3.3A I 6×10.3×2.25	6.00 ±0.10	10.30 ±0.15	3.30 MAX	2.25 ±0.10	1.77 ±0.10	0.80 MIN	2.00 ±0.10	8.80 ±0.15		12&15
U6.1×9.35×4.83 I 6.1×9.35×2.79	6.10 ±0.15	9.35 ±0.15	4.83 ±0.10	2.79 ±0.10	1.78 ±0.10	0.84 ±0.10	0.56 ±0.10	7.59 ±0.15	3.56 ±0.15	7&15
U6.2×9.4×4.74-L I 6.2×9.4×2.61	6.20 ±0.10	9.40 ±0.15	4.74 ±0.10	2.61 ±0.10	1.25 ±0.10	1.15 ±0.10	0.50 ±0.10	7.60 ±0.15	4.00 REF	6&15
U6.2×9.4×4.64A I 6.2×9.4×2.61	6.20 ±0.10	9.40 ±0.15	4.64 ±0.10	2.61 ±0.10	1.35 ±0.10	1.15 ±0.10	0.50 ±0.10	7.60 ±0.15	4.10 ±0.15	7&15
U6.25×9.4×5.4 I 6.25×9.4×2.3	6.25 ±0.15	9.40 ±0.15	5.40 ±0.10	2.30 ±0.10	1.65 ±0.10	0.75 ±0.10	0.50 ±0.10	7.80 ±0.15	4.80 ±0.15	7&15
U6.3×9.3×7.4 I 6.3×9.3×2.4	6.30 ±0.15	9.30 ±0.15	7.40 ±0.10	2.40 ±0.10	1.65 ±0.10	1.60 ±0.10		6.20 ±0.10		9&15
U6.3×9.4×4.8 I 6.3×9.4×2.5	6.30 ±0.15	9.40 ±0.15	4.80 ±0.10	2.50 ±0.10	1.40 ±0.10	1.30 ±0.10	0.70 ±0.10	7.50 ±0.15		1&15
U6.35×6.35×1.45 I 6.35×6.35×1.35	6.35 ±0.10	6.35 ±0.10	1.45 ±0.10	1.35 ±0.10	3.20 ±0.10	0.40 ±0.10	0.25 ±0.05	3.15 ±0.15		3&16
U6.35×6.35×2.38 I 6.35×6.35×2.15	6.35 ±0.10	6.35 ±0.10	2.38 ±0.10	2.15 ±0.10	3.05 ±0.10	0.33 ±0.05	0.22 ±0.05	3.55 ±0.15		3&16
U6.45×9×2.39 I 6.45×9×2.2	6.45 ±0.15	9.00 ±0.15	2.39 ±0.10	2.20 ±0.10	3.05 ±0.10	0.34 ±0.08	0.23 ±0.08	6.00 ±0.15		3&16
U6.6×6×2.25 I 6.6×6×2.24	6.60 ±0.15	6.00 ±0.15	2.25 ±0.10	2.24 ±0.10	2.60 REF	0.40 ±0.10	0.20 ±0.08	3.20 REF	4.55 REF	3&17

P/N & Dimension 品号 & 尺寸	A/A1	B/B1	C	C1	E	F	G	H	I	Fig
U6.6×6.8×2.65 I 6.6×6.8×2	6.60 ±0.15	6.80 ±0.15	2.65 ±0.10	2.00 ±0.10	2.70 ±0.10	0.50 ±0.10	0.15 ±0.10	6.15 ±0.20		1&15
U6.6×6.98×2.01 I 6.6×6.98×1.6	6.60 ±0.15	6.98 ±0.15	2.01 ±0.10	1.60 ±0.10	2.72 ±0.10	0.41 ±0.10	0.15 ±0.05	4.44 ±0.10		3&16
U6.6×7×1.95 I 6.6×7×1.3	6.60 ±0.15	7.00 ±0.15	2.00 +0.05/-0.1	1.30 ±0.10	3.70 ±0.10	0.40 +0.10/-0.05	0.20 ±0.05	6.40 ±0.15	3.00 ±0.15	6&15
U6.6×9.1×2.25 I 6.6×9.1×2.24	6.60 ±0.15	9.10 ±0.15	2.25 ±0.10	2.24 ±0.10	2.60 ±0.15	0.45 ±0.10	0.24 ±0.10	3.20 REF	4.55 REF	3&17
U6.71×6.2×2.79 I 6.81×6.3×1.88	6.71+0/-0.2 6.81+0/-0.2	6.20+0/-0.2 6.3+0/-0.2	2.79 +0/-0.10	1.88 ±0.05	2.55 +0.10/-0	0.46 +0.10/-0	0.20 +0.10/-0			2&15
U6.71×9.1×2.8 I 6.71×9.1×1.85	6.71±0.10	9.10±0.10	2.84 +0/-0.20	1.85 ±0.08	2.59 +0.20/-0	0.46 +0.20/-0	0.20 +0.20/-0	3.80 ±0.15		10&15
U6.71×9.2×2.75 I 6.81×9.3×1.85	6.71+0/-0.2 6.81+0/-0.2	9.20+0/-0.3 9.30+0/-0.3	2.79 +0.05/-0.15	1.85 ±0.08	2.55 +0.15/-0.05	0.46 +0.15/-0.05	0.20 +0.10/-0			2&15
U6.7×9.6×2.85 I 6.7×9.6×1.9	6.70 ±0.10	9.60 ±0.15	2.85 ±0.10	1.90 ±0.10	2.30 ±0.10	0.60 ±0.10	0.35 ±0.10	9.10 ±0.15	5.00 ±0.15	7&15
U6.7×13.9×2.4 I 6.7×13.9×2.15	6.70 ±0.15	13.90 ±0.15	2.40 ±0.10	2.15 ±0.10	2.90 ±0.10	0.45 ±0.10	0.25 ±0.10	9.30 ±0.15		3&16
U6.8×9.3×3.1 I 6.8×9.3×1.9	6.80 ±0.10	9.30 ±0.15	3.10 ±0.10	1.90 ±0.10	3.00 ±0.10	0.65 ±0.10	0.55 ±0.08	8.00 ±0.15	3.90 ±0.15	6&16
U6.8×10×2.7 I 6.8×10×2.1	6.80 ±0.10	10.00 ±0.15	2.70 ±0.10	2.10 ±0.10	3.20 ±0.10	0.75 ±0.10	0.50 ±0.08	8.60 ±0.15	5.00 ±0.15	3&18
U7×6.1×2.7 I 7×6.1×1.8	7.00 ±0.10	6.10 ±0.10	2.70 ±0.10	1.80 ±0.10	3.40 ±0.10	0.55 ±0.10	0.30 ±0.10	1.20 ±0.15		4&15
U7×7×3.9 I 7×7×2.5	7.00 ±0.15	7.00 ±0.15	3.90 ±0.10	2.50 ±0.10	1.55 ±0.10	0.65 ±0.10	0.30 ±0.10	5.80 ±0.15	2.50 ±0.15	6&15
U7×9.8×4.38 I 7×9.8×2.5	7.00 ±0.15	9.80 ±0.15	4.38 ±0.10	2.60 ±0.10	1.90 ±0.10	0.80 ±0.10	0.53 ±0.10	9.00 ±0.15		1&15
U7×6.1×2.7 I 7×6.1×1.8	7.00 ±0.10	6.10 ±0.10	2.70 ±0.10	1.80 ±0.10	3.40 ±0.10	0.55 ±0.10	0.30 ±0.10	1.20 ±0.15		4&15
U7×10×4.5 I 7×10.×2.5	7.00 ±0.15	10.00 ±0.15	4.50 ±0.10	2.50 ±0.10	1.70 ±0.10	0.80 ±0.10	0.60 ±0.10	8.80 ±0.15	3.80 ±0.15	6&15
U7×12.5×4.5 I 7×12.5×3	7.00 ±0.15	12.50 ±0.15	4.50 ±0.10	3.00 ±0.10	2.80 ±0.10	1.00 ±0.10		10.70 ±0.15		8&15
U7.04×6.35×3.56 I 7.04×6.35×2.84	7.04 ±0.10	6.35 ±0.10	3.56 ±0.10	2.84 ±0.10	1.47 ±0.10	0.51 ±0.10	0.20 ±0.10			2&15
U7.1×10×4.45 I 7.1×10×2.4	7.10 ±0.15	10.00 ±0.15	4.45 ±0.10	2.40 ±0.10	2.00 ±0.10	0.90 ±0.10	0.50 ±0.10	8.80 ±0.15		1&15
U7.11×9.91×5.51 I 7.11×9.91×2.97	7.11 ±0.15	9.91 ±0.15	5.51 ±0.20	2.97 ±0.10	1.07 ±0.10	1.17 ±0.10	7.26 ±0.15			5&15
U7.2×6.4×4.9 I 7.2×6.4×3.1	7.20 ±0.15	6.40±0.15 7.00±0.15	4.90 ±0.10	3.10 ±0.10	1.05 ±0.10	1.80 ±0.10		6.40 ±0.15	1.00 ±0.10	11&21

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

P/N & Dimension 品号 & 尺寸	A/A1	B/B1	C	C1	E	F	G	H	I	Fig
U7.2×9.8×4.4 I 7.2×9.8×3.5/2.2	7.20 ±0.15	9.80 ±0.15	4.40 ±0.10	3.50/2.20 ±0.10	2.15 ±0.10	0.80 ±0.10	0.60 ±0.10			2&15
U7.2×10.5×5.15 I 7.2×10.5×2.9	7.20 ±0.15	10.50 ±0.15	5.15 ±0.10	2.90 ±0.10	1.50 ±0.10	1.30 ±0.10	0.60 ±0.10	8.90 ±0.15		1&15
U7.28×9.22×5.43 I 7.28×9.22×3.05	7.28 ±0.15	9.22 ±0.15	5.43 ±0.10	3.05 ±0.10	1.05 ±0.10	1.95 ±0.10	2.97 ±0.10	7.18 ±0.10		12&15
U7.28×9.28×6.1 I 7.28×9.28×2.35	7.28 ±0.15	9.28 ±0.15	6.10 ±0.10	2.35 ±0.10	0.96 ±0.10	1.97 ±0.10	2.60 ±0.10	6.18 ±0.10		12&15
U7.49×9.14×3.86 I 7.49×9.14×3.3	7.49 ±0.15	9.14 ±0.18	3.86 ±0.10	3.30 ±0.10	2.46 ±0.10	0.71 ±0.10	0.41 ±0.05	4.83 ±0.15		3&16
U7.5×9×3.8 I 7.5×9×3.2	7.50 ±0.15	9.00 ±0.15	3.80 ±0.10	3.20 ±0.10	2.40 ±0.10	0.70 ±0.10	0.35 ±0.10	4.60 REF	4.85 REF	3&17
U7.5×9.5×3 I 7.5×9.5×3	7.50 ±0.15	9.50 ±0.15	3.00 ±0.10	3.00 ±0.10	2.50 ±0.15	0.40 ±0.10	0.20 ±0.10	4.20 REF	4.90 REF	3&17
U7.5×10×4.5 I 7.5×10×3.3	7.50 ±0.15	10.00 ±0.20	4.50 ±0.10	3.30 ±0.10	2.00 ±0.10	0.90 ±0.10	0.30 ±0.10	9.35 ±0.20		1&15
U7.5×12.5×2.1 I 7.5×12.5×1.5	7.50 ±0.15	12.50 ±0.15	2.10 ±0.10	1.50 ±0.08	4.30 ±0.10	0.40 +0.10/-0.05	0.22 ±0.08			2&15
U7.54×12.14×4.7 I 7.54×12.14×2.72	7.54 ±0.15	12.14 ±0.15	4.70 ±0.10	2.72 ±0.10	2.26 ±0.10	0.89 ±0.10	0.51 ±0.10	10.62 ±0.15		1&15
U7.62×9.86×2.43 I 7.62×9.86×2.15	7.62 ±0.15	9.86 ±0.15	2.43 ±0.10	2.15 ±0.10	2.62 ±0.10	0.48 ±0.08	0.20 ±0.08	5.74 ±0.15		3&16
U7.67×9.7×3.38A I 7.77×9.7×2.59	7.67+0/-0.23 7.67+0/-0.23	9.70 +0/-0.28	3.38 ±0.10	2.59 ±0.10	2.34 +0.10/-0	0.41 +0.10/-0	0.20 +0.10/-0	9.19 +0/-0.25		1&15
U7.7×9.2×3.8 I 7.7×9.2×3.2	7.70 ±0.15	9.20 ±0.15	3.80 ±0.10	3.20 ±0.10	2.25 ±0.10	0.65 ±0.10	0.45 ±0.10	8.70 ±0.15		1&15
U7.7×9.7×4.85 I 7.7×9.7×2.7	7.70 ±0.15	9.70 ±0.15	4.85 ±0.10	2.70 ±0.10	2.30 ±0.10	1.10 ±0.10	0.70 ±0.10	8.10 ±0.15	4.10 ±0.15	6&15
U7.7×10×4.5 I 7.7×10×2.6/2.1	7.70 ±0.15	10.00 ±0.20	4.50 ±0.10	2.60/2.10 ±0.10	1.80 ±0.10	0.75 ±0.10	0.55 ±0.10	8.90 ±0.15	3.70 ±0.15	6&15
U7.7×10×4.5 I 7.7×10×3.5W	7.70 ±0.15	10.00 ±0.20	4.50 ±0.10	3.50 ±0.10	1.80 ±0.10	0.75 ±0.10	0.55 ±0.10	8.90 ±0.15	3.70 ±0.15	6&20
U7.7×10.65×2.8 I 7.7×10.65×1.7	7.70 ±0.15	10.65 ±0.15	2.80 ±0.10	1.70 ±0.10	2.65 ±0.10	0.47 ±0.10	0.30 ±0.10	9.95 ±0.15	5.55 REF	7&15
U7.7×11.7×3.6 I 7.7×11.7×3.3	7.70 ±0.15	11.70 ±0.20	3.60 ±0.10	3.30 ±0.10	1.90 ±0.15	0.90 ±0.10	0.65 ±0.10	10.20 ±0.20	6.70 ±0.20	3&18
U7.8×9.8×4.95 I7.8×9.8×2.44	7.80 ±0.15	9.80 ±0.15	4.90 ±0.10	2.44 ±0.05	1.68 ±0.10	1.22 ±0.10	0.58 ±0.07	7.98 ±0.15	4.39 ±0.15	7&15
U7.8×10.2×3.95 I 7.8×10.2×2.73	7.80 ±0.10	10.20 ±0.15	3.95 ±0.10	2.73 ±0.10	2.25 ±0.10	0.60 ±0.10	0.45 ±0.05	9.00 ±0.15	5.00 ±0.15	6&15
U7.8×10.2×4.07 I 7.8×10.2×3.9W	7.80 ±0.10	10.20 ±0.15	4.07 ±0.10	3.90 ±0.10	2.25 ±0.10	0.70 ±0.10	0.50 ±0.05	9.00 ±0.15	5.00 ±0.15	6&20

P/N & Dimension 品号 & 尺寸	A/A1	B/B1	C	C1	E	F	G	H	I	Fig
U7.8×10.13×4.46 I 7.8×10.13×2.64	7.80 ±0.10	10.13 ±0.15	4.46 ±0.10	2.64 ±0.10	2.24 ±0.10	0.86 ±0.10	0.58 ±0.10	8.46 ±0.15	4.70 ±0.15	7&15
U7.8×10.5×3.3 I 7.8×10.5×3.2	7.80 ±0.15	10.50 ±0.15	3.30 ±0.10	3.20 ±0.10	2.80 ±0.10	0.65 ±0.10	0.35 ±0.10	6.30 ±0.15	5.45 ±0.15	3&17
U7.8×12.8×1.95 I 7.8×12.1×1.85	7.80 ±0.10	12.80±0.15 12.10±0.15	1.95 ±0.08	1.85 ±0.10	4.40 ±0.10	0.35 ±0.07	0.18 ±0.05	9.80 ±0.15		3&16
U7.88×10.52×5.65 I 7.88×10.52×4.75	7.88 ±0.15	10.52 ±0.15	5.65 ±0.10	4.75 ±0.10	2.10 ±0.10	0.70 ±0.10	0.30 ±0.10	9.00 ±0.15		1&15
U7.9×10.5×5.65 I 7.9×10.5×4.75	7.90 ±0.15	10.50 ±0.15	5.65 ±0.10	4.75 ±0.10	2.10 ±0.10	0.70 ±0.10	0.20 ±0.08	9.20 ±0.10		1&15
U8.1×9.8×4.45 I 8.1×9.8×2.85	8.10 ±0.15	9.80 ±0.15	4.45 ±0.10	2.85 ±0.10	4.35 ±0.10	1.60 ±0.10		6.60 ±0.10		8&15
U8.18×5.84×3.99 I 8.18×5.84×3.38	8.18 ±0.15	5.84 ±0.15	3.99 ±0.08	3.38 ±0.08	2.49 ±0.10	0.64 ±0.08	0.25 ±0.05	2.95 ±0.15		3&16
U8.2×16×2.1 I 8.2×16×1.65	8.20 ±0.20	16.00 ±0.20	2.05 ±0.10	1.65 ±0.08	4.40 ±0.10	0.40 ±0.10	0.26 MAX	11.00 ±0.20		3&16
U8.41×13.31×4.85 I 8.41×13.31×3.63	8.41 ±0.15	13.31 ±0.20	4.85 ±0.10	3.63 ±0.10	1.10 ±0.10	1.14 ±0.10				11&15
U8.5×10×4.5 I 8.5×10×2.6	8.50 ±0.15	10.00 ±0.15	4.50 ±0.10	2.60 ±0.10	2.40 ±0.10	1.00 ±0.10	0.50 ±0.10	8.80 ±0.15		1&15
U8.51×9.55×5.31 I 8.51×9.55×3.78	8.51 ±0.15	9.55 ±0.15	5.31 ±0.20	3.78 ±0.10	0.97 ±0.10	1.01 ±0.10	7.77 ±0.15			5&15
U8.5×12.3×4.7T I 8.5×12.3×4.4	8.50 ±0.15	12.30 ±0.15	4.70 ±0.15	4.40 ±0.10	0.90 ±0.10	0.80 ±0.10	0.20 ±0.08	11.30 ±0.15	6.00 ±0.15	7&15
U9.5×11.3×2.9 I 9.5×11.3×2.65	9.50 ±0.15	11.30 ±0.20	2.90 ±0.10	2.65 ±0.10	4.19 ±0.10	0.30 ±0.10				3&15
U10.1×8.9×3.6 I 10.1×10.1×3	10.10 ±0.15	8.90±0.15 10.1±0.15	3.60 ±0.10	3.00 ±0.10	3.20 ±0.10	0.60 ±0.10				3&15
U10.2×10.2×5.8 I 10.2×10.2×3.4	10.20 ±0.20	10.20 ±0.20	5.80 ±0.10	3.40 ±0.10	1.25 +0.15/-0.05	1.25 +0.15/-0.05	0.30 ±0.08	8.00 ±0.20		13&15
U10.2×10.8×5.2 I 10.2×10.8×4.6	10.20 ±0.15	10.80 ±0.15	5.20 ±0.10	4.60 ±0.10	4.00 ±0.10	2.20 ±0.10		6.60 ±0.15	4.00 ±0.10	3&22
U10.5×10.7×5 I 10.5×10.7×3.5	10.50 ±0.15	10.70 ±0.15	5.00 ±0.10	3.50 ±0.10	2.30 ±0.10	0.50 ±0.10	0.30 ±0.10	9.90 ±0.15	5.50 ±0.15	6&15
U10.8×9.7×4.4 I 10.8×9.7×3.8	10.80 ±0.15	9.70 -0.05/-0.15	4.40 ±0.10	3.80 ±0.10	2.20 ±0.10	0.80 ±0.10	0.45 ±0.10	5.20 ±0.15	6.45 ±0.15	3&17
U10.66×10.66×4.57 I 10.82×10.82×3.81	10.66+0/-0.30 10.82±0.15	10.66 +0/-0.3 10.82±0.15	4.57 ±0.10	3.81 ±0.10	2.41 +0/-0.15	0.51 +0.10/-0	0.25 ±0.05	10.16 +0/-0.30		1&15
U10.9×11.18×5.17 I 10.9×11.18×3.35	10.90 ±0.15	11.18 ±0.15	5.17 ±0.10	3.35 ±0.10	2.14 ±0.10	0.85 ±0.10	0.40 ±0.10	10.00 ±0.15	4.58 ±0.15	7&15
U11×10.52×4.86 I 11×10.52×3.81	11.00 ±0.15	10.52 ±0.15	4.86 ±0.10	3.81 ±0.10	2.35 ±0.10	0.63 ±0.10	0.48 ±0.08	10.00 ±0.15		1&15

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

P/N & Dimension 品号 & 尺寸	A/A1	B/B1	C	C1	E	F	G	H	I	Fig
U12.7×4.95×6.35 I 12.7×4.95×2.54	12.70 ±0.30	4.95 ±0.15	6.35 ±0.10	2.54 ±0.15	7.62 ±0.20	3.81 ±0.15				3&15
U12.7×12.7×3.6 I 12.7×12.7×3.7	12.70 ±0.15	12.70 ±0.15	3.60 ±0.10	3.70 ±0.10	5.30 REF	0.40 ±0.10	0.20 ±0.08	7.30 REF	8.85 REF	3&17
U12.7×13×4.57 I 12.7×13×3.81	12.70 ±0.20	13.00 ±0.20	4.57 ±0.10	3.81 ±0.10	3.10 ±0.10	0.65 ±0.10	0.25 ±0.10	12.50 ±0.20		1&15
U12.82×12.82×4.19 I 12.82×12.82×3.38	12.82 +0/-0.3	12.82 +0/-0.3	4.19 ±0.08	3.38 ±0.05	5.84+0 +0/-0.30	0.64 +0.10/-0	0.15 ±0.05	12.44 +0/-0.30		1&15
U13×12.5×5.2 I 13×12.5×3.6	13.00 ±0.20	12.50 ±0.20	5.20 ±0.15	3.60 ±0.10	3.20 ±0.15	1.20 ±0.10	0.50 ±0.10	9.30 ±0.15		10&15

Note:

■ This table only shows common product numbers. If the UI core you need is not listed in the above table, please do not hesitate to contact us.

备注:

■ 此表仅展示常见品号，若您需要的 UI core未標明在上表中，請不吝賜電詢問敝司業務人員。

UD SMD SERIES (UD SMD 系列)

Product Identification 產品識別碼

UD	4	X	4.1	X	2
Configuration Symbol 形状符号	Length (A) 长度		Width (B) 宽度		Height (D)高度

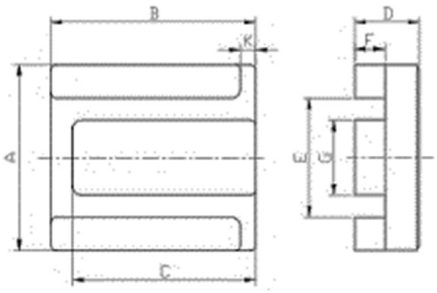


Fig.1

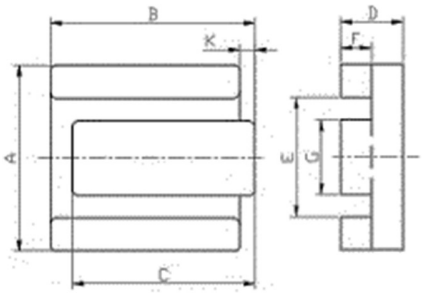


Fig.2

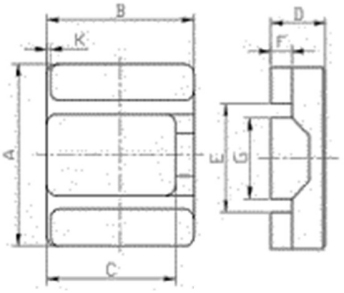


Fig.3

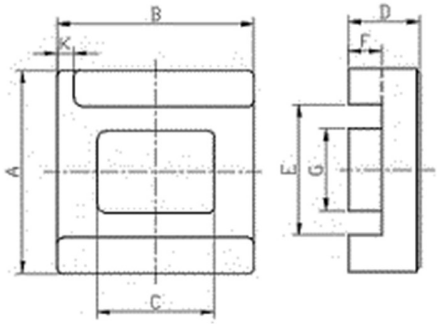


Fig.4

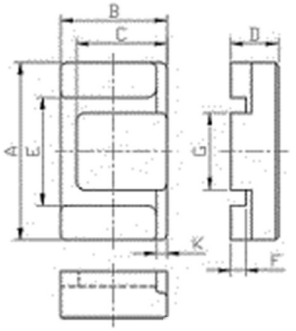


Fig.5

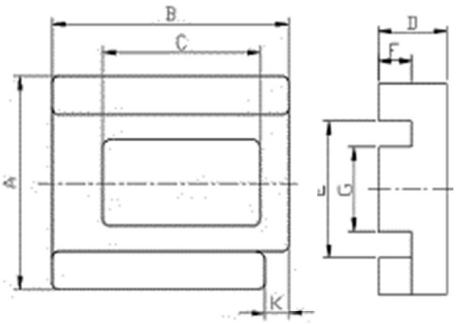


Fig.6

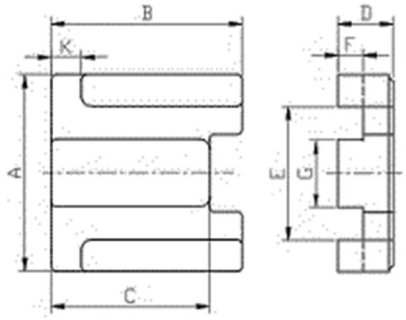


Fig.7

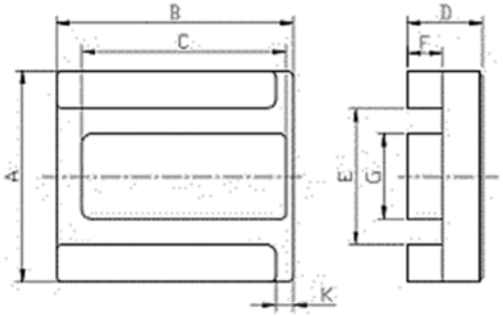


Fig.8

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	H	Le	Ae	Fig
UD4×4.1×2	4.00 ±0.10	4.10 ±0.10	3.60 ±0.10	2.00 ±0.10	2.60 ±0.10	1.25 ±0.10	1.50 ±0.10	0.20 ±0.05	8.41	5.62	1
UD5×6×2.6	5.00 ±0.10	6.00 ±0.10	5.40 ±0.10	2.60 ±0.10	3.20 ±0.10	1.70 ±0.10	1.90 ±0.10	0.30 ±0.05	10.96	10.45	1
UD6.7×10.5×3.2	6.70 ±0.15	10.50 ±0.15	9.75 ±0.15	3.20 ±0.10	3.94 ±0.10	1.82 ±0.10	2.74 ±0.10	0.23 ±0.07	12.79	27.81	1
UD7.4×11.5×3.8	7.40 ±0.10	11.50 ±0.15	10.50 ±0.15	3.80 ±0.10	4.80 ±0.10	2.30 ±0.10	3.10 ±0.10	0.50 ±0.08	15.47	31.59	1
UD7.7×9×3.75	7.70 ±0.15	9.00 ±0.15	6.70 ±0.15	3.75 ±0.10	5.30 ±0.15	2.40 ±0.10	3.20 ±0.10	0.70 ±0.10	16.02	21.43	6
UD7.8×3.4×2.2T	7.80 ±0.10	3.40 ±0.10	2.70 ±0.10	2.20 ±0.10	4.80 ±0.10	1.00 ±0.10	3.20 ±0.10	0.60 ±0.10	9.81	8.43	7
UD7.8×7.6×2.2T	7.80 ±0.15	7.60 ±0.15	6.30 ±0.10	2.20 ±0.10	5.30 ±0.10	1.00 ±0.10	2.70 ±0.10	1.20 ±0.10	10.5	17.35	7
UD9.3×8.5×3.06	9.30 ±0.15	8.50 ±0.15	7.50 ±0.15	3.06 ±0.10	5.90 ±0.10	1.41 ±0.10	3.80 ±0.10	0.70 ±0.10	13.15	27.81	1
UD9.36×11.57×2.84	9.36 ±0.15	11.57 ±0.15	9.60 ±0.15	2.84 ±0.10	6.06 ±0.12	1.26 ±0.10	3.62 ±0.10	0.87 ±0.10	12.65	35.11	1
UD9.4×8.55×.08	9.40 ±0.15	8.55 ±0.15	7.50 ±0.15	3.08 ±0.10	5.80 ±0.10	1.30 ±0.10	3.75 ±0.10	0.70 ±0.08	12.92	29.05	1
UD9.4×9.55×3.06	9.40 ±0.15	9.55 ±0.15	8.23 ±0.15	3.06 ±0.10	6.16 ±0.15	1.64 ±0.10	3.32 ±0.10	1.10 ±0.10	14.14	27.42	1
UD9.4×11.6×3.1	9.40 ±0.15	11.60 ±0.15	10.20 ±0.15	3.10 ±0.10	6.05 ±0.10	1.40 ±0.10	3.70 ±0.10	0.80 ±0.10	13.39	37.81	1
UD9.44×5.62×2.53	9.44 ±0.15	5.62 ±0.08	4.80 ±0.10	2.53 ±0.10	5.74 ±0.10	0.80 ±0.10	4.10 ±0.10	0.55 ±0.08	10.6	19.22	5
UD9.5×9.35×3.2	9.50 ±0.15	9.35 ±0.15	5.90 ±0.10	3.20 ±0.10	6.50 ±0.10	1.60 ±0.10	3.75 ±0.10	1.00 ±0.10	14.21	24.43	4
UD9.5×9.7×3	9.50 ±0.15	9.70 ±0.15	8.40 ±0.10	3.00 ±0.10	6.10 ±0.15	1.35 ±0.10	3.50 ±0.10	1.00 ±0.10	13.28	30.55	1
UD9.5×10.3×3	9.50 ±0.15	10.30 ±0.15	9.00 ±0.15	3.00 ±0.10	6.20 ±0.10	1.50 ±0.10	3.60 ±0.10	0.70 ±0.08	13.63	31.41	1
UD9.68×11.35×2.79	9.68 ±0.15	11.35 ±0.15	9.71 ±0.15	2.79 ±0.10	6.41 ±0.15	1.31 ±0.10	3.36 ±0.10	1.15 ±0.10	13.17	33.07	1
UD9.7×8.1×3	9.70 ±0.15	8.10 ±0.15	7.10 ±0.10	3.00 ±0.15	5.80 ±0.10	1.15 ±0.15	4.30 ±0.10	1.00 ±0.10	12.21	29.89	3
UD9.7×9.2×3.8	9.70 ±0.15	9.20 ±0.15	7.70 ±0.10	3.80 ±0.10	6.20 ±0.10	1.75 ±0.10	3.95 ±0.10	0.75 ±0.10	15.37	32.34	1
UD9.7×11.5×2.75A	9.70 ±0.15	11.50 ±0.15	9.80 ±0.15	2.75 ±0.10	6.70 ±0.10	1.20 ±0.10	3.30 ±0.10	1.35 ±0.10	13.1	33.2	1
UD9.74×9.24×3.28	9.74 ±0.15	9.24 ±0.15	7.82 ±0.10	3.28 ±0.10	6.48 ±0.10	1.18 ±0.10	4.06 ±0.10	0.90 ±0.10	13.27	32.76	1

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	H	Le	Ae	Fig
UD9.75×9.3×3.2	9.75 ±0.15	9.30 ±0.15	8.00 ±0.15	3.20 ±0.10	6.05 ±0.10	1.35 ±0.10	3.90 ±0.10	0.80 ±0.10	13.42	32.41	1
UD9.8×4.8×2.4	9.80 ±0.15	4.80 ±0.10	3.75 ±0.10	2.40 ±0.10	6.50 ±0.15	0.90 ±0.10	4.50 ±0.10	0.70 ±0.08	10.94	14.64	2
UD9.8×5.6×2.2A	9.80 ±0.15	5.60 ±0.15	4.30 ±0.15	2.20 ±0.08	6.40 ±0.15	0.95 ±0.10	4.00 ±0.10	0.80 ±0.08	10.84	14.97	2
UD9.8×11.5×2.75	9.80 ±0.15	11.50 ±0.15	9.90 ±0.15	2.75 ±0.10	6.65 ±0.15	1.25 ±0.10	3.20 ±0.10	1.40 ±0.10	13.27	32.97	1
UD9.8×11.6×2.8	9.80 ±0.15	11.60 ±0.15	9.90 ±0.15	2.80 ±0.10	6.65 ±0.10	1.20 ±0.10	3.20 ±0.10	1.30 ±0.10	13.23	34.08	1
UD10.45×11.4×3.59	10.45 ±0.15	11.40 ±0.15	10.15 ±0.15	3.59 ±0.10	6.86 ±0.10	1.68 ±0.10	4.40 ±0.10	0.85 ±0.10	15.3	42.12	1
UD10.5×9.1×3.6	10.50 ±0.15	9.10 ±0.15	8.20 ±0.10	3.60 ±0.10	6.10 ±0.10	1.50 ±0.10	4.50 ±0.10	0.40 ±0.10	14.38	37.63	1
UD10.5×11.6×3.65	10.50 ±0.15	11.60 ±0.15	10.10 ±0.15	3.65 ±0.10	6.60 ±0.10	1.65 ±0.10	4.30 ±0.10	0.80 ±0.10	15.26	43.97	1
UD10.4×11.6×3.6	10.40 ±0.15	11.60 ±0.20	10.35 ±0.15	3.65 MAX	6.70 ±0.15	1.70 ±0.10	4.20 ±0.10	0.85 ±0.10	15.46	43.05	1
UD11.7×11.5×2.75	11.70 ±0.15	11.50 ±0.15	8.60 ±0.15	2.75 ±0.10	8.45 ±0.15	1.25 ±0.10	2.66 ±0.10	1.45 ±0.10	15.09	28.75	8

Note:

■ This table only shows common product numbers. If the UD core you need is not listed in the above table, please do not hesitate to contact us.

备注:

■ 此表仅展示常见品号，若您需要的 UD core未標明在上表中，請不吝賜電詢問敝司業務人員。

EI SERIES (EI 系列)

Product Identification 產品識別碼

EI	4	X	4.1	X	2
Configuration Symbol 形状符号	Length (A/A1) 长度		Width (B/B1) 宽度		Height (C)高度

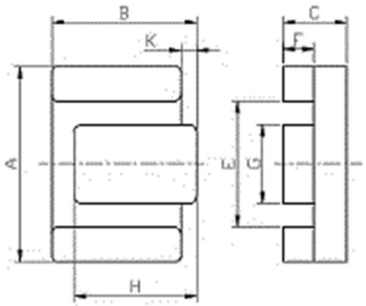


Fig.1

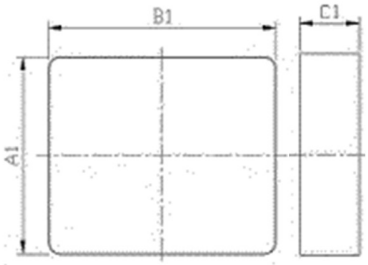


Fig.2

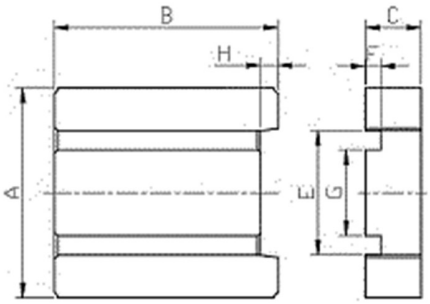


Fig.3

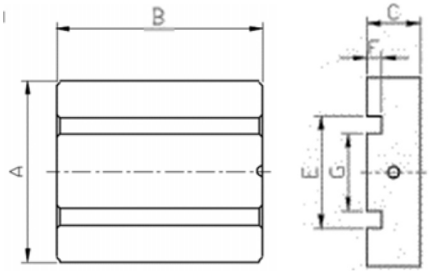


Fig.4

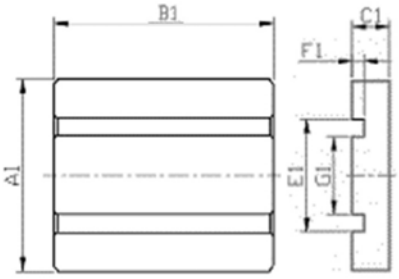


Fig.5

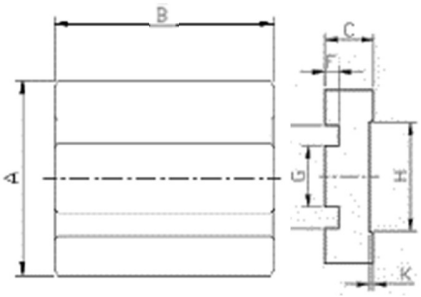


Fig.6

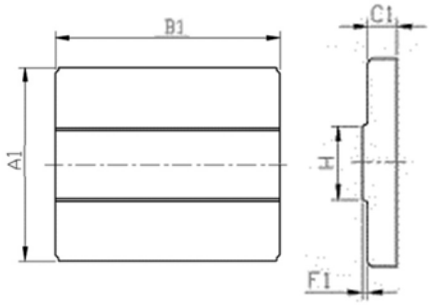


Fig.7

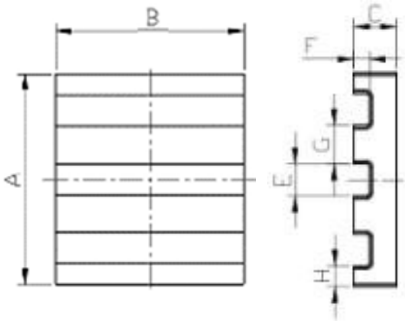


Fig.8

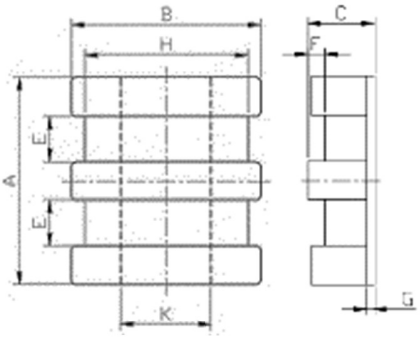


Fig.9

P/N & Dimension 品号 & 尺寸	A/A1	B/B1	C	C1	E/E1	F	F1	G/G1	H	K	Fig
E6.7×6.1×1.35 I 6.7×6.1×0.65	6.70 ±0.10	6.10 ±0.10	1.35 ±0.08	0.65 ±0.08	1.00 ±0.08	0.55 ±0.08	/	1.20 ±0.08	0.65 ±0.08	/	8 2
E8.8×12×2.45T I 8.8×12×1.71	8.80 ±0.15	12.00 ±0.15	2.45 ±0.10	1.70 ±0.10	5.20 ±0.15	0.70 ±0.10	/	3.60 ±0.15	0.75 ±0.10	/	3 2
E9×7.55×2 I 9×6.6×1.7	9.00 ±0.15	7.55/6.60±0.15	2.00 ±0.10	1.70 ±0.05	6.40 ±0.10	0.50 ±0.10	0.36 ±0.05	2.60 ±0.10	3.20 ±0.10	/	4 7
E10.3×10.3×2.45 IE10.3×10.3×1.85	10.30 ±0.15	10.30 ±0.20	2.45 ±0.10	1.85 ±0.10	6.90 ±0.15	0.80 ±0.10	0.30 ±0.10	3.80 ±0.10	0.75 ±0.10	/	4 5
E10.4×9×5.1 I 10.4×9×2.1	10.40 ±0.15	9.00 ±0.15	5.10 ±0.10	2.10 ±0.10	6.00 ±0.15	3.00 ±0.15	/	4.40 ±0.15	8.20 ±0.15	0.65 ±0.15	1 2
E12.3×10.4×2.1 I 12.3×10.4×1.68	12.30 ±0.15	10.40 ±0.15	2.10 ±0.10	1.68 ±0.08	9.20 ±0.15	0.65 ±0.08	0.43 ±0.08	2.90 ±0.10	4.50 ±0.15	/	4 7
E13×13×3.67 I 13×13×2.9	13.00 +0/-0.40	13.00 +0/-0.40	3.67 ±0.10	2.90 ±0.10	7.20 ±0.20	0.51 ±0.10	/	2.90 ±0.10	7.60 ±0.20	0.13 ±0.08	6 2
E13×13×2.1 I 13×13×1.75	13.00 ±0.15	13.00 ±0.15	2.10 ±0.10	1.75 ±0.10	7.76 ±0.15	0.45 ±0.08	/	2.90 ±0.10	/	/	4 2
E13.6×12.6×4.4 I 13.6×12.6×2.75	13.60 ±0.15	12.60 ±0.15	4.40 ±0.10	2.75 ±0.10	3.00 ±0.10	1.15 ±0.08	/	0.50 ±0.08	10.90 ±0.10	6.00 ±0.15	9 2

Note:

■ This table only shows common product numbers. If the EI core you need is not listed in the above table, please do not hesitate to contact us.

备注:

■ 此表仅展示常见品号，若您需要的 EI core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

FI SERIES (FI 系列)

Product Identification 產品識別碼

F	6.5	X	17.37	X	5.31
Configuration Symbol 形状符号	Length (A/A1) 长度		Width (B/B1) 宽度		Height (C/C1)高度

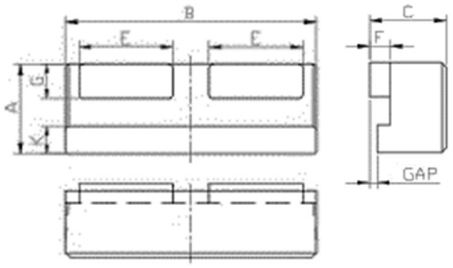


Fig.1

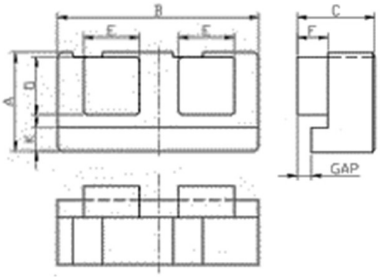


Fig.2

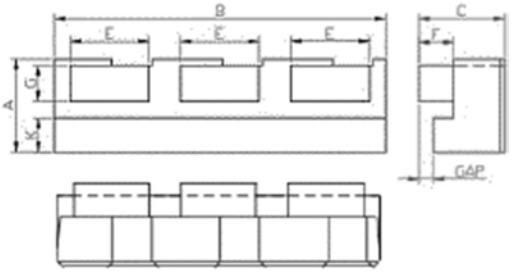


Fig.3

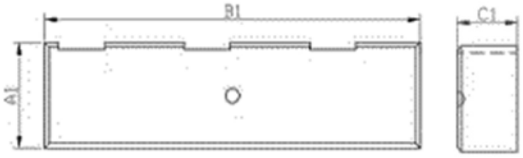


Fig.4

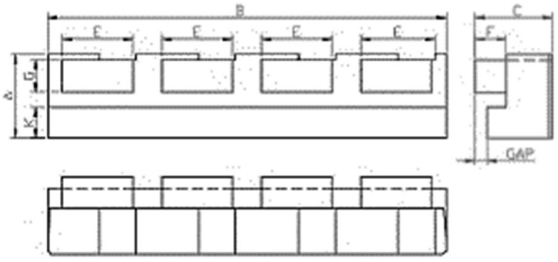


Fig.5

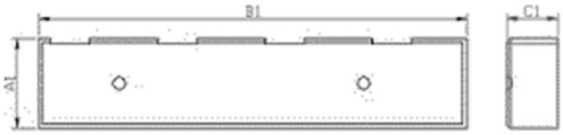


Fig.6

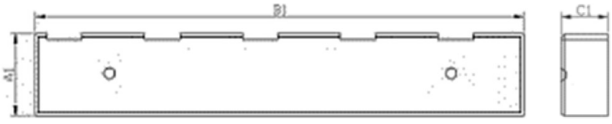


Fig.8

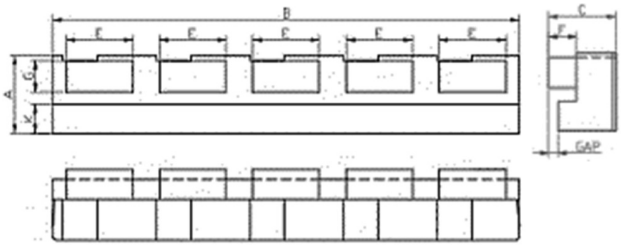


Fig.7

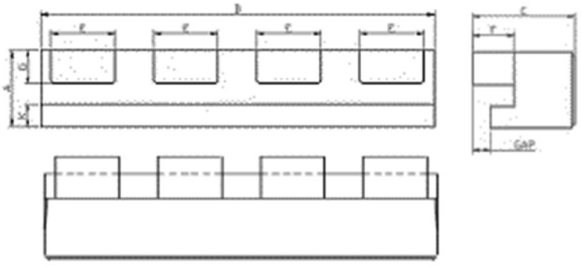


Fig.9

P/N & Dimension 品号 & 尺寸	A	B	C	C1	E	F	G	K	GAP	Fig
F 6.5×17.37×5.31	6.50 ±0.15	17.37 ±0.30	5.31 ±0.15	/	6.50 ±0.15	1.40 ±0.10	2.49 ±0.15	2.00 ±0.15	0.51 REF	1
F 6.5×35.4×5.3	6.50 ±0.15	35.40 ±0.50	5.30 ±0.15	/	6.50 ±0.15	1.40 ±0.10	2.50 ±0.15	2.00 ±0.15	0.50 REF	9
F 6.8×11.7×5.65	6.80 ±0.15	11.70 ±0.20	5.65 ±0.15	/	3.60 ±0.15	3.65 ±0.10	3.80 ±0.10	1.80 ±0.10	1.30 REF	1
F 7.25×11.7×5.65	7.25 ±0.20	11.70 ±0.20	5.65 ±0.15	/	3.40 ±0.15	3.65 ±0.10	3.80 ±0.10	1.80 ±0.10	1.30 REF	2
F 7.5×27×6.9 I 7.5×27×4.2	7.50 ±0.20	27.00 ±0.40	6.90 ±0.20	4.20 ±0.15	6.30 ±0.15	2.80 ±0.10	2.90 ±0.10	2.80 ±0.10	1.15 REF	3 4
F 7.5×36×6.9 I 7.5×36×4.2	7.50 ±0.20	36.00 ±0.50	6.90 ±0.20	4.20 ±0.15	6.30 ±0.15	2.90 ±0.10	2.90 ±0.10	2.80 ±0.10	1.05 REF	5 6
F 7.5×45×6.9 I 7.5×45×4.2	7.50 ±0.20	45.00 ±0.65	6.90 ±0.20	4.20 ±0.15	6.30 ±0.15	2.90 ±0.10	2.90 ±0.10	2.80 ±0.10	1.05 REF	7 8

Note:

- This table only shows common product numbers. If the FI core you need is not listed in the above table, please do not hesitate to contact us.

备注：

- 此表仅展示常见品号，若您需要的 FI core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

SB/SMB SERIES (SB/SMB 系列)

Product Identification 產品識別碼

SB	6.9	X	10	X	9.2	T
Configuration Symbol 形状符号	Length (A) 长度		Width (B) 宽度		Height (D)高度	Auxiliary Symbol 辅助符号

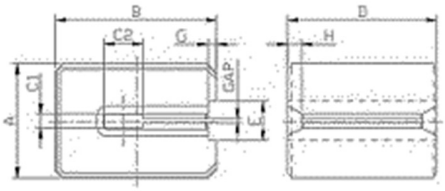


Fig.1

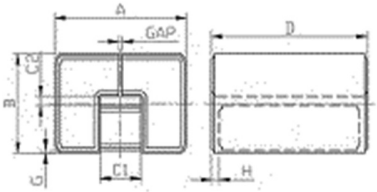


Fig.2

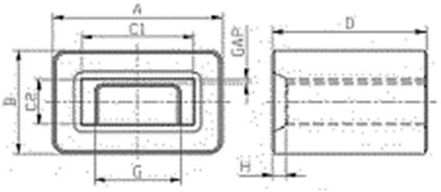


Fig.3

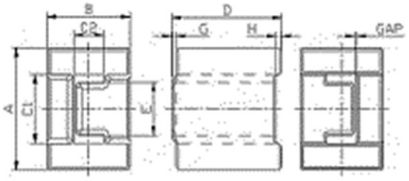


Fig.4

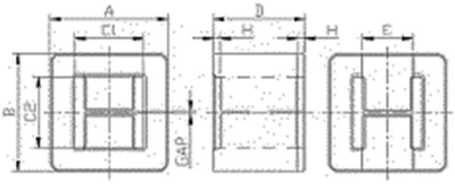


Fig.5

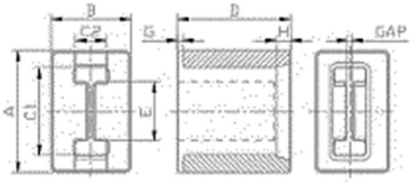


Fig.6

P/N & Dimension 品号 & 尺寸	A	B	C1	C2	D	E	G	H	GAP	Fig
SB6.9×10×9.2T GAP0.18	6.90 ±0.20	10.00 ±0.20	0.90 ±0.10	2.40 ±0.10	9.20 ±0.20	2.35 ±0.10	0.50 ±0.10	0.95 ±0.10	0.18 REF	1
SB7.95×7.08×9.6 G-190	7.95 ±0.15	7.08 ±0.15	2.20 ±0.15	0.80 ±0.10	9.60 ±0.15	/	0.58 ±0.08	0.35 ±0.08	0.20 REF	2
SMB10.5×6.4×9.5 GAP0.28	10.50 ±0.15	6.40 ±0.15	7.08 ±0.15	2.80 ±0.10	9.50 ±0.15	/	5.28 ±0.10	0.90 ±0.10	0.28 REF	3
SMB10.6×7.2×9.6T GAP0.16	10.60 ±0.15	7.20 ±0.15	6.00 ±0.15	2.60 ±0.10	9.60 ±0.15	4.62 ±0.10	0.40 ±0.10	0.50 ±0.10	0.16 REF	4
SMB12×12×10 GAP0.38	12.00 ±0.20	12.00 ±0.20	6.95 ±0.15	6.95 ±0.15	10.00 ±0.20	5.05 ±0.15	/	0.70 ±0.10	0.38 REF	5
SMB9.5×6.2×8.8T GAP0.35	9.50 ±0.15	6.20 ±0.15	6.80 ±0.15	2.40 ±0.15	8.80 ±0.15	4.60 ±0.15	0.40 ±0.10	1.10 ±0.10	0.35 REF	6

Note:

- This table only shows common product numbers. If the SB /SMB core you need is not listed in the above table, please do not hesitate to contact us.
- SB/SMB core can have the Gap process for electrical adjustment, the minimum gap is 0.1mm.

备注:

此表仅展示常见品号，若您需要的 SB/SMB core未標明在上表中，請不吝賜電詢問敝司業務人員。

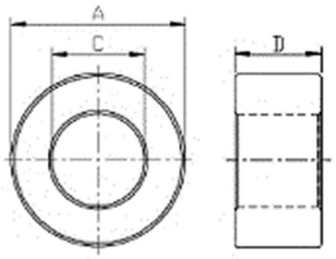
SB/SMB core 可增加Gap制程进行电性的调整，GAP尺寸最小可达到0.1mm。

T TOROID CORE (RING CORE TYPE)

Product Identification 產品識別碼

T	6.9	X	10	X	9.2	C
Configuration Symbol 形状符号	Outside Diameter (A) 外径		Inside Diameter (C) 内径		Height (D) 高度	Auxiliary Symbol 辅助符号

C: Epoxy Coating
P: Parylene Coating



P/N & Dimension 品号 & 尺寸	A	C	D	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)	Wt (g/pcs)
T2.54×1.27×1.27	2.54 ±0.15	1.27 ±0.15	1.27 ±0.15	7.14	5.53	0.77	4.29	0.02
T3×1.43×2.46	3.00 ±0.15	1.43 ±0.15	2.46 ±0.15	3.45	6.36	1.85	11.74	0.7
T5.05×1.3×1.2	5.05 ±0.20	1.30 ±0.15	1.20 ±0.20	3.86	7.46	1.93	14.44	0.11
T6.3×3.8×3.2	6.30 ±0.20	3.80 ±0.15	3.20 ±0.20	3.88	15.21	3.92	59.56	0.31
T6.5×2.5×2.8	6.50 ±0.20	2.50 ±0.15	2.80 ±0.20	2.35	12.19	5.19	63.32	0.39
T7.5×4×4	7.50 ±0.20	4.00 ±0.15	4.00 ±0.20	2.50	16.93	6.77	114.66	0.62
T7.6×1.75×3.2	7.60 ±0.20	1.75 ±0.15	3.20 ±0.20	1.34	10.49	7.84	82.28	0.67
T7.6×2.8×4.8	7.60 ±0.20	2.80 ±0.15	4.80 ±0.20	1.31	13.91	10.61	147.54	0.92
T7.6×3.2×4.8	7.60 ±0.20	3.20 ±0.15	4.80 ±0.20	1.51	15.02	9.93	149.08	0.88
T8×3.15×4.8	8.00 ±0.20	3.15 ±0.15	4.80 ±0.20	1.40	15.21	10.83	164.81	1.00
T8×5×3	8.00 ±0.30	5.00 ±0.30	3.00 ±0.20	4.46	19.69	4.42	86.98	0.45
T8.25×4.45×4.8	8.25 ±0.30	4.45 ±0.30	4.80 ±0.20	2.12	18.74	8.84	165.55	0.89
T9×5×3	9.00 ±0.40	5.00 ±0.40	3.00 ±0.20	3.56	20.77	5.83	121.12	0.65

P/N & Dimension 品号 & 尺寸	A	C	D	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)	Wt (g/pcs)
T9×6×4	9.00 ±0.40	6.00 ±0.40	4.00 ±0.20	3.87	22.93	5.92	135.70	0.69
T9.3×4.45×3	9.30 ±0.40	4.45 ±0.40	3.00 ±0.20	2.84	19.76	6.95	137.42	0.77
T9.5×4.6×3	9.50 ±0.40	4.60 ±0.40	3.00 ±0.20	2.89	20.32	7.04	142.97	0.80
T9.5×5.5×4.8	9.50 ±0.40	5.50 ±0.40	4.80 ±0.20	2.40	22.43	9.36	210.03	1.11
T10×5×5	10.00 ±0.40	5.00 ±0.40	5.00 ±0.30	1.81	1.78	12.01	261.56	1.44
T10×6×4	10.00 ±0.40	6.00 ±0.40	4.00 ±0.20	3.08	24.07	7.83	188.44	0.99
T10.3×6.1×4	10.30 ±0.40	6.10 ±0.40	4.00 ±0.20	3.00	24.62	8.21	202.14	1.06
T11×5×5	11.00 ±0.40	5.00 ±0.40	5.00 ±0.30	1.59	22.71	14.25	323.48	1.85
T12.5×7.5×5	12.50 ±0.40	7.50 ±0.40	5.00 ±0.20	2.46	30.09	12.23	368.05	1.92
T12.7×7.15×4.78	12.70 ±0.40	7.15 ±0.40	4.78 ±0.20	2.29	29.53	12.91	381.09	2.03
T12.7×7.7×6.35	12.70 ±0.40	7.70 ±0.40	6.35 ±0.30	1.98	30.75	15.55	478.02	2.49
T12.7×7.9×6.35	12.70 ±0.40	7.90 ±0.40	6.35 ±0.30	2.08	31.17	14.96	466.27	2.42
T13×7.1×4.8	13.00 ±0.40	7.10 ±0.40	4.80 ±0.30	2.16	29.73	13.74	408.33	2.19
T13.2×7.3×4	13.20 ±0.40	7.30 ±0.40	4.00 ±0.30	2.65	30.39	11.46	348.33	1.86
T14×7×5	14.00 ±0.40	7.00 ±0.40	5.00 ±0.30	1.81	30.49	16.82	512.65	2.83
T14×8×5	14.00 ±0.40	8.00 ±0.40	5.00 ±0.30	2.25	32.82	14.61	479.62	2.54
T14.5×8.5×5.5	14.50 ±0.40	8.50 ±0.40	5.50 ±0.30	2.14	34.47	16.11	555.37	2.92
T16×11.8×8	16.00 ±0.40	11.8 ±0.40	8.00 ±0.30	2.58	43.00	16.67	716.85	3.59
T16.2×9.8×8	16.20 ±0.40	9.80 ±0.40	8.00 ±0.30	1.56	39.17	25.07	981.92	5.12
T16.2×12×8	16.20 ±0.40	12.00 ±0.40	8.00 ±0.30	2.62	43.64	16.67	727.65	3.65
T17×9.6×6.3	17.00 ±0.40	9.60 ±0.40	6.30 ±0.30	1.75	39.59	22.69	898.20	4.77
T18×10×10	18.00 ±0.50	10.00 ±0.40	10.00 ±0.40	1.07	41.55	38.87	1614.89	8.62

P/N & Dimension 品号 & 尺寸	A	C	D	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)	Wt (g/pcs)
T18.8×11×5	18.00 ±0.50	11.00 ±0.40	5.00 ±0.40	2.55	43.76	17.15	750.55	3.91
T19.8×10×12	19.80 ±0.50	10.00 ±0.40	12.00 ±0.40	0.77	43.36	56.57	2452.60	13.49
T20×10×10	20.00 ±0.50	10.00 ±0.40	10.00 ±0.40	0.91	43.55	48.05	2092.46	11.55
T20.5×10×10	20.50 ±0.50	10.00 ±0.40	10.00 ±0.40	0.88	44.03	50.30	2214.79	12.32
T21.2×10.6×9.7	21.20 ±0.50	10.60 ±0.40	9.70 ±0.40	0.93	46.16	49.40	2280.55	12.58
T22×13.8×7	22.00 ±0.60	13.80 ±0.60	7.00 ±0.40	1.92	54.25	28.19	1528.96	7.91
T22×14×8	22.00 ±0.60	14.00 ±0.60	8.00 ±0.40	1.74	54.67	31.46	1719.90	8.87
T25×15×10	25.00 ±0.60	15.00 ±0.60	10.00 ±0.40	1.23	60.18	48.93	2944.42	15.39
T25×15.4×10	25.00 ±0.60	15.40 ±0.60	10.00 ±0.40	1.30	61.04	47.07	2873.44	14.93
T27×14×15	27.00 ±0.70	14.00 ±0.60	15.00 ±0.50	0.64	60.00	94.07	5643.74	30.77
T28×18.4×15	28.00 ±0.80	18.40 ±0.60	15.00 ±0.50	1.00	70.79	70.95	5022.44	25.71
T31×14×8	31.00 ±0.80	14.00 ±0.70	8.00 ±0.50	0.99	63.76	64.53	4114.13	23.55
T31×19×8	29.00 ±0.80	19.00 ±0.70	8.00 ±0.50	1.86	73.20	39.41	2884.65	14.78
T36×23×10	36.00 ±0.80	23.00 ±0.80	10.00 ±0.50	1.40	89.65	63.92	5730.60	29.52
T38×18.9×12.7	38.00 ±0.80	19.00 ±0.80	12.70 ±0.50	0.71	82.75	115.93	9593.28	52.93
T38.6×19.4×13	38.60 ±0.80	19.40 ±0.80	13.00 ±0.50	0.70	84.30	119.99	10114.97	55.71
T47×31×19	47.00 ±1.00	31.00 ±1.00	19.00 ±0.60	0.79	119.06	149.83	17837.54	91.25
T61×35.5×12.7	61.00 ±1.50	35.50 ±1.50	12.70 ±0.50	0.91	144.42	158.03	22823.00	120.27

Note:

■ This table only shows common product numbers. If the T core you need is not listed in the above table, please do not hesitate to contact us.

备注:

■ 此表仅展示常见品号，若您需要的 T core未標明在上表中，請不吝賜電詢問敝司業務人員

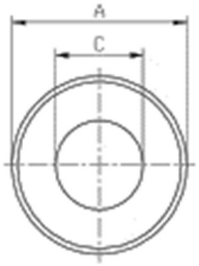
如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

RH BEAD CORE (SHIELD TYPE)

Product Identification 產品識別碼

RH	3.5	X	1.3	X	3.25	P
Configuration Symbol 形状符号	Outside Diameter (A) 外径		Inside Diameter (C) 内径		Height (D) 高度	Auxiliary Symbol 辅助符号

C: Epoxy Coating
P: Parylene Coating



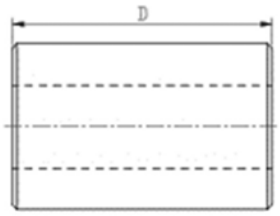


Fig.1

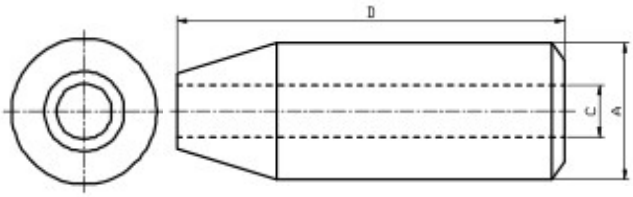


Fig.2

P/N & Dimension 品号 & 尺寸	A	C	D	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)	Fig.
RH3.5×0.86×4.45	3.50±0.15	0.86±0.05	4.45±0.25	1.006	2.55	2.54	6.47	1
RH3.5x0.86x6	3.50±0.15	0.86±0.05	6.00±0.20	0.746	5.03	6.74	33.88	1
RH3.5×1.3×3.25P	3.50±0.15	1.30±0.10	3.25±0.20	1.952	6.44	3.30	21.21	1
RH3.55x1.78x3.1P	3.55±0.15	1.78±0.10	3.10±0.15	2.936	7.74	2.64	20.42	1
RH4×1×8	4.00±0.20	1.00±0.15	8.00±0.30	0.567	5.81	10.25	59.52	1
RH5×1.5×11	5.00±0.15	1.50±0.15	11.00±0.30	0.474	8.11	17.08	138.47	1
RH5.1×1.58×6.35	5.10±0.20	1.58±0.15	6.35±0.30	0.844	8.43	9.98	84.11	1
RH5.7x1.5x8	5.70±0.20	1.50±0.20	8.00±0.30	0.588	8.54	14.51	123.90	1
RH6×2.7×25R	6.00+0/-0.20	2.70+0.20/-0	25.00±0.30	0.315	12.31	39.13	481.84	2
RH6.35x3.18x25.4	6.35±0.15	3.18±0.25	25.40±0.75	0.358	13.84	38.69	535.49	1
RH11x3.5x14	11.00±0.50	3.50±0.20	14.00±0.40	0.392	18.47	47.12	870.19	1
RH11x3.5x16	11.00±0.50	3.50±0.25	16.00±0.30	0.343	18.47	53.85	994.50	1

P/N & Dimension 品号 & 尺寸	A	C	D	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)	Fig.
RH12x5.35x14.4	12.00±0.30	5.35±0.20	14.40±0.50	0.540	24.50	45.36	1111.31	1
RH14.3x6.35x28.6	14.30±0.45	6.35±0.20	28.60±0.60	0.271	29.13	107.64	3135.64	1
RH17.45×9.5×28.6	17.45±0.40	9.50±0.25	28.60±0.75	0.361	39.83	110.25	4391.40	1
RH50.8×25.4×38.1	50.80±1.30	25.40±0.80	38.10±1.00	0.238	110.62	464.95	51433.81	1

Note:

■ This table only shows common product numbers. If the RH core you need is not listed in the above table, please do not hesitate to contact us.

备注:

● 此表仅展示常见品号，若您需要的 RH core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

RU CORE (SHIELD TYPE)

Product Identification 產品識別碼

RU	10	X	4.6	X	3.25
Configuration Symbol 形状符号	Outside Diameter (A) 外径		Outside Diameter (B) 外径		Height (C)高度

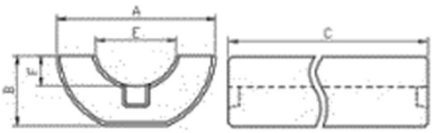


Fig.1

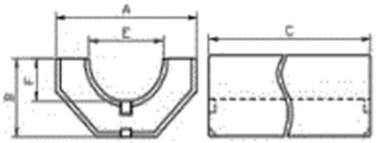


Fig.2

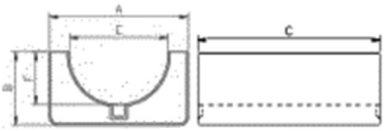


Fig.3

P/N & Dimension 品号 & 尺寸	A	B	C	E	F	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)	Fig.
RU10×4.6×19.95	10.00 ±0.25	4.60 ±0.15	19.95 ±0.35	5.10 ±0.20	2.45 MIN	0.3775	17.25	45.69	788	1
RU12.3×6.2×25.4	12.30 ±0.35	6.20 ±0.15	25.40 ±0.45	5.10 ±0.20	2.45 MIN	0.1886	22.67	120.21	2725	1
RU15×7.5×28.9	15.00 ±0.25	7.50 ±0.15	28.90 ±0.40	6.60 ±0.30	3.15 MIN	0.4369	19.09	43.68	834	2
RU16.5×8.25×28.6	16.50 ±0.25	8.25 ±0.15	28.60 ±0.40	9.00 ±0.30	4.35 MIN	0.4498	28.76	63.94	1839	2
RU18.6×9.5×28.9	18.60 ±0.45	9.50 ±0.25	28.90 ±0.40	10.15 ±0.30	4.93 MIN	0.4742	30.63	64.60	1979	2
RU25.9×13×38.85	25.90 ±0.50	13.00 ±0.25	38.85 ±0.50	18.80 ±0.30	9.25 MIN	0.5045	64.62	128.06	8276	3
RU25.9×13.07×29.1	25.90 ±0.50	13.07 ±0.15	29.10 ±0.50	12.95 +0.40/-0.20	6.38 MIN	0.4148	39.97	96.35	3851	2

Note:

■ This table only shows common product numbers. If the RU core you need is not listed in the above table, please do not hesitate to contact us.

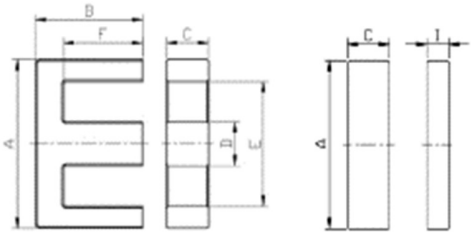
备注:

● 此表仅展示常见品号，若您需要的 RU core未標明在上表中，請不吝賜電詢問敝司業務人員。

EI SERIES (EI 系列)

Product Identification 產品識別碼

EI	19
Configuration Symbol 形状符号	Length (A) 长度



P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	I	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
EI 19	19.20 ±0.50	13.60 ±0.30	4.80 ±0.20	4.55 ±0.25	14.20 MIN	11.40 ±0.30	2.40 ±0.20	3.58	39.89	22.27	888.58
EI 20	20.00 ±0.30	13.60 ±0.15	5.00 ±0.20	4.55 ±0.15	14.50 ±0.20	11.15 ±0.15	2.30 ±0.10	3.38	40.00	23.66	946.32
EI 22	22.00 ±0.45	14.65 ±0.25	5.75 ±0.25	5.75 ±0.25	16.30 ±0.35	10.80 ±0.30	4.00 ±0.20	2.33	42.12	36.22	1525.55
EI 25(EI25.4)	25.40 ±0.50	16.30 ±0.30	6.40 ±0.30	6.35 ±0.30	18.80 MIN	13.20 ±0.40	2.70 ±0.20	2.49	48.55	38.95	1891.03
EI 28	28.00 ±0.50	16.75 ±0.25	10.60 ±0.20	7.20 ±0.30	18.60 MIN	12.25 ±0.25	3.50 ±0.30	1.15	48.32	83.73	4045.89
EI 30	30.25 ±0.60	21.30 ±0.20	10.65 ±0.30	10.65 ±0.25	20.35 ±0.35	16.30 ±0.30	5.50 ±0.20	1.07	58.53	109.87	6431.08
EI 40	40.00 ±0.50	27.25 ±0.25	11.65 ±0.35	11.65 ±0.35	29.00 ±0.50	20.25 ±0.25	7.50 ±0.30	1.09	77.33	141.92	10974.67

Note:

- This table only shows common product numbers. If the EI core you need is not listed in the above table, please do not hesitate to contact us.

备注:

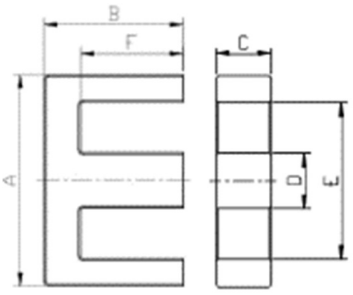
- 此表仅展示常见品号，若您需要的 EI core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

EE/EEL/EF SERIES (EE/EEL/EF 系列)

Product Identification 產品識別碼

EE	4
Configuration Symbol 形状符号	Length (A) 长度



P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
EE 4	4.40 ±0.20	1.60 ±0.15	1.50 ±0.15	1.25 ±0.15	2.90 MIN	1.00 ±0.10	4.17	7.79	1.87	14.55
EE 5	5.25 ±0.20	2.65 ±0.15	2.00 ±0.15	1.35 ±0.15	3.85 MIN	2.00 ±0.15	4.81	12.66	2.63	33.34
EE 8.3	8.30 ±0.20	4.00 ±0.15	3.60 ±0.10	1.85 ±0.20	6.00 MIN	3.00 ±0.15	2.74	19.42	7.10	137.88
EE 10	10.20 ±0.20	5.50 ±0.15	4.90 ±0.15	2.45 ±0.15	7.70 MIN	4.20 ±0.15	2.21	26.11	11.79	307.92
EE 13	13.00 ±0.20	6.00 ±0.15	6.15 ±0.15	2.75 ±0.15	10.00 MIN	4.60 ±0.15	1.77	30.23	17.11	517.27
EE 13A	13.00 ±0.20	6.00 ±0.15	6.10 ±0.10	2.78 ±0.15	10.50 ±0.30	4.65 ±0.15	1.88	30.45	16.16	492.16
EE 16	16.00 ±0.30	7.40 ±0.15	4.80 ±0.20	4.00 ±0.20	11.70 MIN	5.30 ±0.15	1.83	35.63	19.49	694.23
EE 19	19.30 ±0.30	8.15 ±0.20	5.00 ±0.20	4.65 ±0.15	14.20 MIN	5.70 ±0.20	1.70	40.25	23.74	955.57
EE 20.5	20.50 ±0.40	9.30 ±0.20	7.00 ±0.20	5.00 ±0.15	14.20 MIN	6.55 ±0.20	1.16	44.10	38.11	1680.73
EE 22	22.00 ±0.30	9.35 ±0.20	5.75 ±0.20	5.75 ±0.25	13.00 MIN	5.35 ±0.20	0.98	39.81	40.65	1618.42
EE 25	25.40 ±0.60	9.70 ±0.20	6.40 ±0.30	6.35 ±0.30	18.50 MIN	6.55 ±0.20	1.20	48.80	40.62	1982.58
EE 27.3	27.30 ±0.60	15.30 ±0.20	11.70 ±0.20	7.70 ±0.30	19.30 MIN	11.40 ±0.25	0.77	69.67	90.39	6297.48
EE 28	28.00 ±0.50	10.05 ±0.20	10.60 ±0.20	7.20 ±0.30	18.60 MIN	6.05 ±0.20	0.57	48.31	84.35	4074.71
EE 30	30.10 ±0.70	15.00 ±0.20	7.05 ±0.25	6.95 ±0.25	19.90 ±0.40	10.00 ±0.30	1.09	65.50	59.94	3925.66
EE 30.5	30.48 ±0.60	13.36 ±0.20	9.22 ±0.20	9.22 ±0.20	22.00 ±0.60	9.04 ±0.20	0.77	62.60	80.81	5058.76
EE 35	34.90 ±0.70	14.40 ±0.25	9.15 ±0.25	9.20 ±0.20	25.75 ±0.50	9.80 ±0.25	0.84	70.18	84.03	5897.18

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
EE 41	41.00 ±0.80	16.50 ±0.30	12.60 ±0.30	12.70 ±0.20	28.54 ±0.50	10.45 ±0.25	0.49	77.00	156.41	12043.86
EE 80	80.00 ±2.00	38.10 ±0.40	19.80 ±0.30	19.80 ±0.60	60.20 ±1.60	28.30 ±0.40	0.47	184.54	390.83	72123.86
EEL16	16.00 ±0.30	9.80 ±0.20	4.80 ±0.20	4.00 ±0.20	11.70 MIN	7.70 ±0.20	2.33	45.22	19.42	878.45
EEL19	20.00 ±0.50	13.70 ±0.25	4.10 ±0.15	4.55 ±0.20	14.30 MIN	11.15 ±0.15	3.08	62.27	20.23	1259.86
EEL23	23.00 ±0.50	13.00 ±0.25	5.70 ±0.25	5.50 ±0.25	17.50 ±0.50	10.00 ±0.20	1.90	60.96	32.04	1953.43
EEL41	41.00 ±0.60	29.30 ±0.25	3.50 ±0.20	16.00 ±0.25	25.00 +0.5/-0.35	20.70 +0.3/-0.1	2.09	118.12	56.50	6673.90
EF 12.7	12.70 ±0.40	6.40 ±0.20	3.60 ±0.20	3.65 ±0.20	8.80 MIN	4.65 ±0.15	2.29	29.64	12.92	382.91
EF 16	16.10 ±0.60	8.05 ±0.15	4.50 ±0.20	4.55 ±0.15	11.30 MIN	5.90 ±0.20	1.88	37.60	19.98	751.22
EF 20	20.00 ±0.40	9.90 ±0.20	5.65 ±0.25	5.70 ±0.20	14.10 MIN	7.20 ±0.20	1.47	46.16	31.50	1454.10
EF 25	25.05 ±0.75	12.55 ±0.25	10.60 ±0.30	7.25 ±0.25	17.50 MIN	8.90 ±0.25	0.75	57.58	76.99	4432.94

Note:

- This table only shows common product numbers. If the **EE/EEL** core you need is not listed in the above table, please do not hesitate to contact us.

备注:

- 此表仅展示常见品号，若您需要的 **EE/EEL** core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

ER CORE

Product Identification 產品識別碼

ER	9.5	X	4.9	X	2.45
Configuration Symbol 形状符号	Length (A) 长度		Width (C) 宽度		Height (B)高度

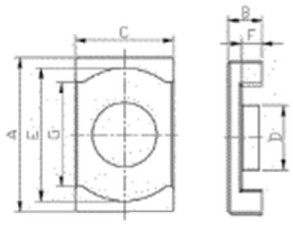


Fig.1

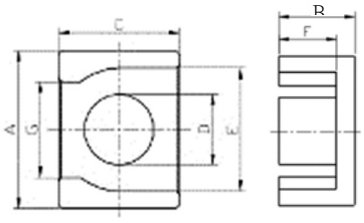


Fig.2

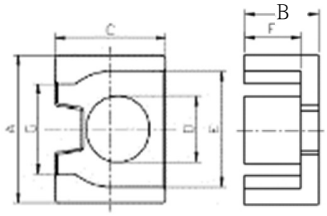


Fig.3

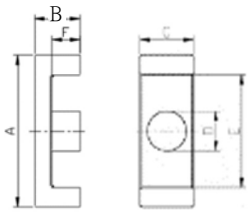


Fig.4

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	Fig.	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
ER9.5×4.9×2.45	9.45 ±0.20	2.45 ±0.15	4.90 ±0.10	3.40 ±0.15	7.65 ±0.15	1.70 ±0.15	5.65 REF	1	1.64	14.07	8.59	120.91
ER10.83×5.9×2.45	10.83 ±0.20	2.45 ±0.10	5.90 ±0.15	4.15 ±0.15	8.85 ±0.20	1.58 ±0.10	8.10 ±0.20	1	1.31	15.42	11.78	181.71
ER12.2×9×4	12.20 ±0.20	4.00 ±0.10	9.00 ±0.15	5.55 ±0.10	10.00 ±0.20	2.53 ±0.10	8.60 ±0.15	3	0.83	21.56	25.83	556.75
ER12.5×12.5×2.9	12.50 ±0.30	2.90 ±0.15	12.50 ±0.30	5.50 ±0.15	10.00 ±0.20	1.90 ±0.15	6.00 ±0.20	2	0.66	17.67	26.71	471.94
ER14.5×6.7×2.95	14.50 ±0.20	2.95 ±0.10	6.70 ±0.20	4.70 ±0.10	11.80 ±0.20	1.65 ±0.10	/	4	1.13	19.88	17.54	348.74
ER20×7.6×15	20.00 ±0.40	15.00 ±0.20	7.60 ±0.30	7.60 ±0.30	14.00 MIN	12.00 ±0.20	/	1	1.43	65.79	45.99	3025.64
ER28.55×11.4×14	28.55 ±0.55	14.00 ±0.25	11.40 ±0.25	9.90 ±0.25	21.20 MIN	9.65 ±0.25	/	1	0.75	64.63	86.42	5585.02

Note:

■ This table only shows common product numbers. If the ER core you need is not listed in the above table, please do not hesitate to contact us.

备注:

■ 此表仅展示常见品号，若您需要的 ER core未標明在上表中，請不吝賜電詢問敝司業務人員。

ETD CORE

Product Identification 產品識別碼

ETD	20.3	X	7.6	X	10.5
Configuration Symbol 形状符号	Length (A) 长度		Width (C) 宽度		Height (B)高度

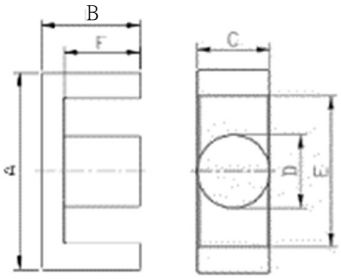


Fig.1

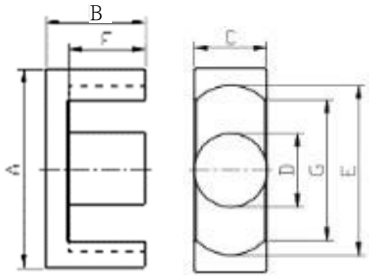


Fig.2

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	Fig.	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
ETD 20.3×7.6×10.5	20.30 ±0.40	10.50 ±0.20	7.60 ±0.20	7.60 ±0.15	14.50 MIN	7.50 ±0.20		1	1.06	48.19	45.41	2188.23
ETD 25.5×7.5×9.5	25.50 ±0.50	9.50 ±0.20	7.50 ±0.20	7.50 ±0.15	19.80 MIN	6.40 ±0.20		1	1.09	48.88	44.76	2188.05
ETD 29.8×9.5×15.8	29.80 ±0.80	15.80 ±0.20	9.50 ±0.30	9.50 ±0.30	22.70 ±0.70	11.00 ±0.30	22.00 REF	2	0.95	71.96	75.60	5440.35
ETD 34.2×10.8×17.3	34.20 ±0.80	17.30 ±0.20	10.80 ±0.30	10.80 ±0.40	26.30 ±0.70	12.30 ±0.30	25.60 REF	2	0.85	81.08	95.04	7705.74
ETD 39.1×12.5×23	39.10 ±0.60	23.00 ±0.30	12.50 ±0.30	12.50 ±0.30	29.30 MIN	17.30 ±0.30	28.60 REF	2	0.82	105.35	128.20	13505.80
ETD 48.7×16.3×24.7	48.70 ±1.10	24.70 ±0.30	16.30 ±0.40	16.30 ±0.40	37.00 ±0.90	18.10 ±0.40	35.50 REF	2	0.56	116.68	208.97	24383.48
ETD 44×14.8×22.3	44.00 ±1.00	22.30 ±0.30	14.80 ±0.40	14.80 ±0.40	33.80 ±0.80	16.50 ±0.40	32.50 REF	2	0.63	105.92	168.21	17816.09

Note:

- This table only shows common product numbers. If the ETD core you need is not listed in the above table, please do not hesitate to contact us.

备注:

- 此表仅展示常见品号，若您需要的 ETD core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

EFD/EPC CORE

Product Identification 產品識別碼

EFD	12.8	X	6.7	X	5.8
Configuration Symbol 形状符号	Length (A) 长度		Width (C) 宽度		Height (B)高度

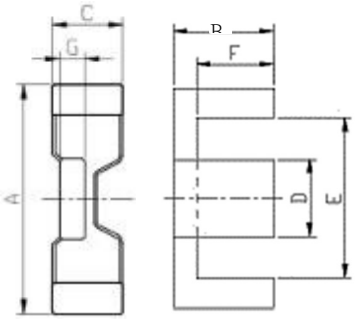


Fig.1

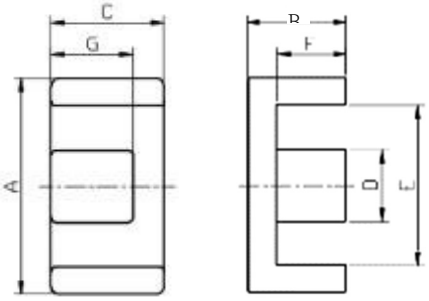


Fig.2

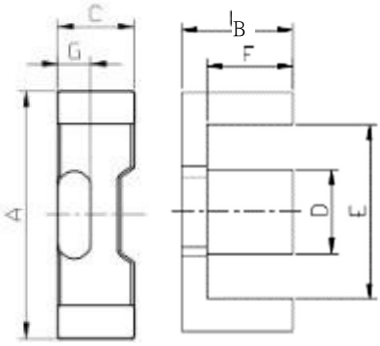


Fig.3

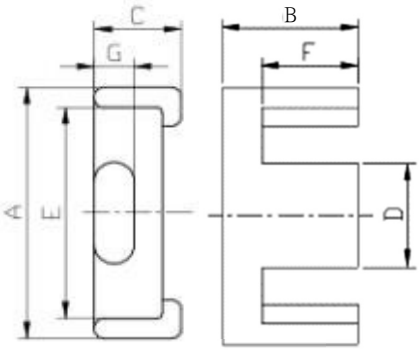


Fig.4

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	Fig.	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
EFD 6.5	6.50 ±0.15	3.65 ±0.10	3.00 ±0.10	2.50 ±0.10	5.20 ±0.15	2.85 ±0.10	1.70 ±0.10	2	4.11	16.68	4.06	67.80
EFD 12.8×6.7×5.8	12.80 ±0.40	5.80 ±0.20	6.70 ±0.25	4.25 ±0.25	9.50 MIN	4.05 ±0.20	4.85 ±0.20	2	1.25	26.91	21.53	579.53
EFD 14	14.00 ±0.35	8.65 ±0.15	3.35 ±0.15	5.60 ±0.15	10.60 ±0.30	6.45 ±0.15	1.60 ±0.10	3	3.62	37.23	10.28	382.81
EFD 15	15.00 ±0.40	7.50 ±0.15	4.65 ±0.15	5.30 ±0.20	11.00 ±0.35	5.50 ±0.25	2.20 ±0.15	1	2.37	33.26	14.02	466.20
EFD 20	20.00 ±0.55	10.00 ±0.15	6.65 ±0.15	8.90 ±0.20	15.40 ±0.50	7.70 ±0.25	3.10 ±0.15	1	1.64	45.49	27.73	1261.61
EFD 25	25.00 ±0.65	12.50 ±0.20	9.10 ±0.20	11.40 ±0.20	18.70 ±0.60	9.30 ±0.25	5.20 ±0.15	1	0.99	55.53	56.28	3125.34

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	Fig.	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
EFD 25A	25.00 ±0.65	13.50 ±0.20	9.30 ±0.20	11.00 ±0.30	18.30 ±0.60	9.35 ±0.25	5.20 ±0.15	2	0.94	57.69	61.33	3538.15
EFD 30	30.00 ±0.50	15.00 ±0.20	9.10 ±0.20	14.60 ±0.30	23.30 +0.5/-0	11.20 ±0.30	4.90 ±0.15	1	1.04	66.35	63.86	4237.26
EPC 13A	13.80 ±0.30	7.25 ±0.15	4.60 ±0.15	5.60 ±0.15	11.60 ±0.30	5.15 ±0.15	2.10 ±0.15	4	2.37	26.10	11.00	287.10
EPC 17A	17.80 ±0.40	8.75 ±0.20	6.00 ±0.30	7.70 ±0.20	14.80 MIN	6.25 ±0.20	2.80 ±0.15	4	1.93	31.20	16.20	505.44

Note:

- This table only shows common product numbers. If the EFD/EPC core you need is not listed in the above table, please do not hesitate to contact us.

备注:

- 此表仅展示常见品号，若您需要的 EFD/EPC core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

EP CORE

Product Identification 產品識別碼

EP	8	X	7.1	X	2
Configuration Symbol 形状符号	Length (A) 长度		Width (C) 宽度		Height (B)高度

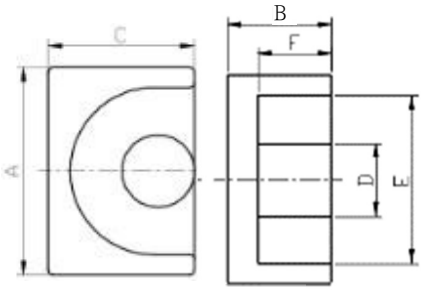


Fig.1

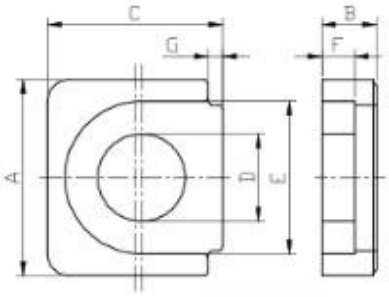


Fig.2

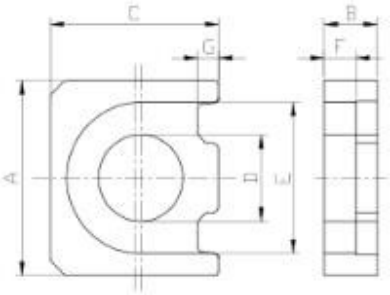


Fig.3

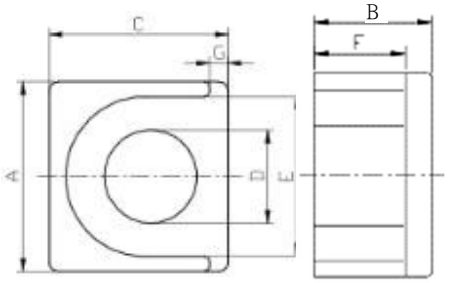


Fig.4

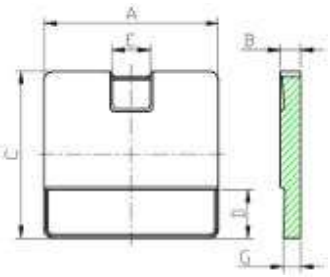


Fig.5

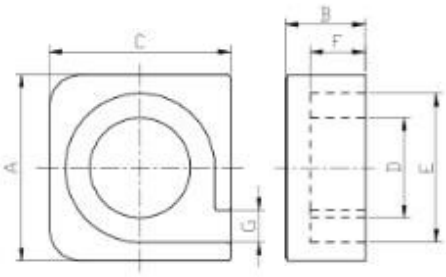


Fig.6

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	Fig.	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
EP 7	9.20 ±0.20	3.75 ±0.15	6.35 ±0.15	3.30 ±0.15	7.40 ±0.20	2.65 ±0.15	/	1	1.52	15.70	10.30	161.71
P8×7.1×2	8.00 ±0.15	2.00 ±0.10	7.10 ±0.15	2.00 ±0.10	6.30 ±0.15	1.00 ±0.10	0.60 ±0.10	2	0.84	5.03	6.02	30.28
EP9×8×2.5	9.00 ±0.15	2.50 ±0.10	8.00 ±0.15	4.00 ±0.15	7.00 ±0.15	1.50 ±0.15	1.00 ±0.15	3	0.66	9.40	14.20	133.48
EP 10	11.50 ±0.20	5.10 ±0.15	7.65 ±0.20	3.30 ±0.15	9.30 ±0.20	3.70 ±0.15	/	1	1.70	19.20	11.30	216.96
EP10.2×9.7×5.8	10.20 ±0.20	5.80 ±0.10	9.70 ±0.15	5.00 ±0.10	8.60 ±0.20	4.50 ±0.10	1.00 ±0.15	4	0.57	11.30	20.00	226.00
I 10.2×9.7×1.3	10.20 ±0.20	1.30 ±0.10	9.70 ±0.20	2.80 ±0.15	2.20 ±0.15	/	1.15 ±0.05	5				
EP 13	12.50 ±0.30	6.35 ±0.15	8.80 ±0.20	4.35 ±0.15	10.00 ±0.30	4.60 ±0.15	/	1	1.24	24.20	19.50	471.90

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	Fig.	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
EP 15	15.00 ±0.30	5.50 ±0.15	14.00 ±0.30	8.00 ±0.20	11.55 ±0.30	3.30 ±0.20	/	1	0.34	18.40	53.70	988.08
EP17.5×17×7.5	17.50 ±0.30	7.50 ±0.20	17.00 ±0.30	9.40 ±0.20	14.00 ±0.30	5.20 ±0.20	3.00 ±0.20	6	0.33	23.00	70.50	1621.50

Note:

■ This table only shows common product numbers. If the EP core you need is not listed in the above table, please do not hesitate to contact us.

备注:

■ 此表仅展示常见品号，若您需要的 EP core未標明在上表中，請不吝賜電詢問敝司業務人員。

ET CORE

Product Identification 產品識別碼

ET	15.3	X	15.3	X	6
Configuration Symbol 形状符号	Length (A) 长度		Width (C) 宽度		Height (B)高度

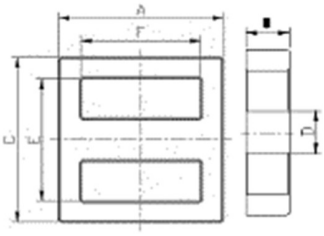


Fig.1

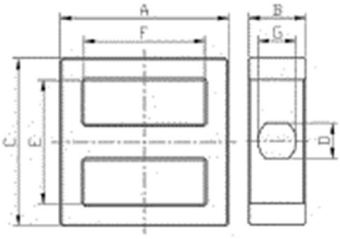


Fig.2

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	Fig.	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
ET15.3×15.3×6	15.30 ±0.30	6.00 ±0.20	15.30 ±0.30	4.10 ±0.20	10.90 MIN	11.20 MIN	4.30 ±0.20	2	1.57	34.93	17.85	623.53
ET18.3×18×8	18.30 ±0.30	8.00 ±0.20	18.00 ±0.30	4.80 REF	13.50 MIN	13.90 MIN	5.00 ±0.20	2	1.73	42.35	24.49	1037.37
ET 20	20.10 ±0.40	4.40 ±0.20	20.10 ±0.40	4.00 ±0.20	16.10 ±0.35	16.10 ±0.35	/	1	2.87	50.58	17.60	890.30
ET21.3×26.7×10	21.30 ±0.30	10.00 ±0.20	26.70 ±0.40	5.00 ±0.15	21.80 MIN	16.00 MIN	5.70 ±0.15	2	1.65	51.14	30.95	1582.64
ET22.6×22×11	22.60 ±0.30	11.00 ±0.20	22.00 ±0.30	5.75 ±0.15	17.80 MIN	18.30 MIN	6.00 ±0.15	2	1.63	55.43	33.96	1882.56
ET 24	24.00 ±0.40	4.00 ±0.30	24.00 ±0.40	4.00 ±0.20	19.20 ±0.30	19.20 ±0.30	/	1	3.38	60.38	17.84	1077.20
ET26×24.7×11.3	26.00 ±0.30	11.30 ±0.30	24.70 ±0.20	6.60 ±0.15	19.80 MIN	21.20 MIN	7.00 ±0.15	2	2.22	47.34	21.34	1009.99
ET 28	28.00 ±0.50	5.00 ±0.30	28.00 ±0.50	5.00 ±0.20	22.20 ±0.40	22.20 ±0.40	/	1	2.56	70.06	27.36	1916.60
ET 29	29.50 ±0.50	10.90 ±0.30	26.80 ±0.50	7.40 ±0.25	21.50 MIN	24.00 MIN	7.60 ±0.20	2	1.47	73.21	49.68	3637.14
ET32.8×35×15	32.80 ±0.50	15.00 ±0.30	35.00 ±0.80	9.60 ±0.30	28.50 MIN	26.00 MIN	10.00 ±0.3	2	1.17	79.42	68.02	5402.48

Note:

■ This table only shows common product numbers. If the ET core you need is not listed in the above table, please do not hesitate to contact us.

备注:

■ 此表仅展示常见品号，若您需要的 ET core未標明在上表中，請不吝賜電詢問敝司業務人員。

P/PC CORE (POT/CUT TYPE)

Product Identification 產品識別碼

P	14	X	4.2
Configuration Symbol 形状符号	Outside Diameter (A) 外径		Width (C) 宽度

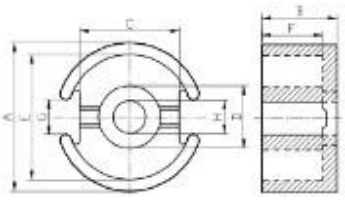


Fig.1

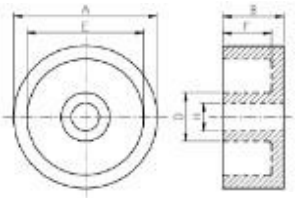


Fig.2

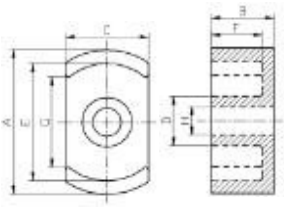


Fig.3

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	H	Fig	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
P14×4.2	14.05 ±0.25	4.20 ±0.20	9.20 ±0.30	5.90 ±0.25	11.80 ±0.50	2.90 ±0.30	2.90 ±0.40	3.10 ±0.20	1	0.78	20.84	26.68	555.99
P14×4.25	14.00 +0/-0.40	4.25 ±0.15	9.80 +0/-0.50	6.00 +0/-0.20	11.60 +0.30/-0	2.95 +0.20/-0	2.70 ±0.20	3.00 +0.20/-0	1	0.83	21.01	25.46	534.98
P18×5.3	18.00 ±0.40	5.30 ±0.25	13.40 ±0.30	7.40 ±0.20	15.15 ±0.25	3.70 ±0.20	3.80 ±0.60	3.10 ±0.20	1	0.60	27.68	46.01	1273.00
P23×5.75	22.90 ±0.45	5.75 ±0.15	/	9.70 ±0.25	18.25 ±0.30	4.00 ±0.20	/	5.10 ±0.15	2	0.47	28.60	61.00	1744.60
PC23×5.75	22.90 ±0.45	5.75 ±0.15	15.20 ±0.30	9.70 ±0.25	18.25 ±0.3	4.00 ±0.20	13.20 MIN	5.10 ±0.15	3				
P23×9	22.90 ±0.45	9.00 ±0.40	/	9.70 ±0.25	18.25 ±0.30	7.20 ±0.40	13.20 MIN	5.10 ±0.15	2	0.54	35.10	64.90	2278.08
PC23×9	22.90 ±0.45	9.00 ±0.40	15.20 ±0.30	9.70 ±0.25	18.25 ±0.30	7.20 ±0.40	/	5.10 ±0.15	3				
P24.6×8.9	24.50 +0/-0.60	8.90 +0/-0.45	18.00 +0/-0.50	11.30 +0/-0.60	20.50 +1.0/-0	5.90 +0.40/-0	3.80 ±0.60	5.20 +0.20/-0	1	0.49	48.91	99.55	4869.05
P25×8	24.70 +0/-0.60	8.00 ±0.20	/	11.25 ±0.20	21.60 ±0.30	5.50 ±0.20	4.60 ±0.20	5.60 ±0.20	1	0.38	30.50	79.67	2429.46
P25.5×8.1	25.50 ±0.50	8.10 ±0.30	18.00 ±0.40	11.30 ±0.20	21.60 ±0.40	5.60 ±0.30	3.80 ±0.60	5.40 ±0.20	1	0.44	48.47	110.33	5347.94
P25.5×8.7	25.50 ±0.50	8.70 ±0.20	18.00 ±0.40	11.30 ±0.30	21.60 ±0.40	6.20 ±0.20	3.80 ±0.60	5.40 ±0.20	1	0.46	50.63	109.10	5524.25
P25.5×12	25.50 ±0.50	12.00 ±0.30	18.00 ±0.50	11.30 ±0.30	21.60 ±0.60	9.50 ±0.30	3.80 ±0.60	5.40 ±0.30	1	0.60	62.69	104.41	6545.64
P30×9.4	30.00 ±0.80	9.40 ±0.40	20.50 +0.6/-0.4	13.50 +0.2/-0.4	25.50 ±0.60	6.60 ±0.40	4.30 ±0.60	5.40 ±0.20	1	0.39	66.11	169.83	11227.35

Note:

■ This table only shows common product numbers. If the POT core you need is not listed in the above table, please do not hesitate to contact us.

备注:

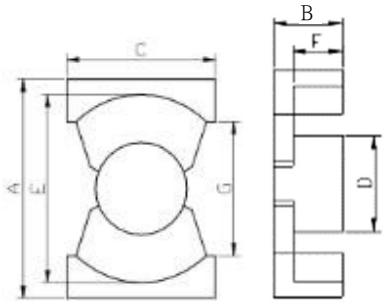
■ 此表仅展示常见品号，若您需要的 POT core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

PQ CORE

Product Identification 產品識別碼

PQ	20	X	16
Configuration Symbol 形状符号	Length (A) 长度		Height*2 (2B) 高度



P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	G	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
PQ2016	21.30 ±0.40	8.10 ±0.15	14.00 ±0.20	8.80 ±0.20	18.00 ±0.40	5.15 ±0.15	12.00 MIN	0.52	33.98	65.26	2217.61
PQ2020	21.30 ±0.40	10.10 ±0.20	14.00 ±0.40	8.80 ±0.20	18.00 ±0.40	7.15 ±0.15	12.00 MIN	0.64	41.90	65.43	2741.65
PQ2620	26.50 ±0.45	9.95 +0.25/-0	19.00 ±0.40	12.00 ±0.20	22.50 ±0.45	5.85 ±0.15	15.50 MIN	0.34	39.82	118.17	4706.05
PQ2625	26.50 ±0.45	12.63 ±0.30	19.00 ±0.45	12.00 ±0.20	22.50 ±0.45	8.30 ±0.30	15.50 MIN	0.42	49.69	119.45	5935.38
PQ3221	32.00 ±0.50	10.48 ±0.15	22.00 ±0.50	13.45 ±0.25	27.50 ±0.50	6.00 ±0.15	19.00 MIN	0.30	43.92	147.46	6476.63
PQ3230	32.00 ±0.50	15.18 ±0.15	22.00 ±0.50	13.45 ±0.25	27.50 ±0.50	10.65 ±0.20	19.00 MIN	0.42	62.44	149.58	9340.59

Note:

- This table only shows common product numbers. If the PQ core you need is not listed in the above table, please do not hesitate to contact us.

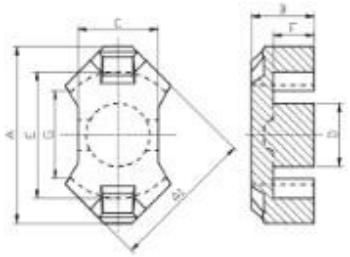
备注:

- 此表仅展示常见品号，若您需要的 PQ core未標明在上表中，請不吝賜電詢問敝司業務人員

RM CORE

Product Identification 產品識別碼

RM	6
Configuration	Center Pole
Symbol	Diameter
形状符号	(D) 中柱外径



P/N & Dimension 品号 & 尺寸	A	A1	B	C	D	E	F	G	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
RM 4	10.80 ±0.20	9.63 ±0.20	5.20 ±0.20	4.45 ±0.15	3.80 ±0.10	8.15 ±0.20	3.60 ±0.20	5.80 MIN	1.90	22.60	11.80	267.00
RM 5	14.30 ±0.30	12.05 ±0.25	5.20 ±0.15	6.60 ±0.20	4.80 ±0.20	10.80 ±0.25	3.25 ±0.20	6.00 MIN	1.12	22.30	20.00	446.00
RM 6A	17.60 ±0.30	14.40 ±0.30	6.20 ±0.10	8.00 ±0.20	6.30 ±0.20	12.65 ±0.25	4.20 ±0.20	8.40 MIN	1.02	27.00	26.40	12.80
RM 8	22.75 ±0.65	19.35 ±0.35	8.20 ±0.20	10.80 ±0.20	8.40 ±0.15	17.30 ±0.30	5.50 ±0.20	9.80 MIN	0.66	38.00	57.60	2188.80
RM 10	27.85 ±0.65	24.15 ±0.55	9.30 ±0.20	13.25 ±0.25	10.70 ±0.20	21.65 ±0.45	6.35 ±0.20	11.30 MIN	0.75	44.00	58.60	2578.40
RM 12	36.75 ±0.65	29.25 ±0.55	12.25 ±0.20	15.90 ±0.25	12.60 ±0.30	25.50 ±0.50	8.55 ±0.20	12.90 MIN	0.47	40.60	87.20	3540.32

Note:

- This table only shows common product numbers. If the RM core you need is not listed in the above table, please do not hesitate to contact us.

备注:

- 此表仅展示常见品号，若您需要的 RM core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

UU CORE

Product Identification 產品識別碼

UU	7.8
Configuration Symbol 形状符号	Length (A) 长度

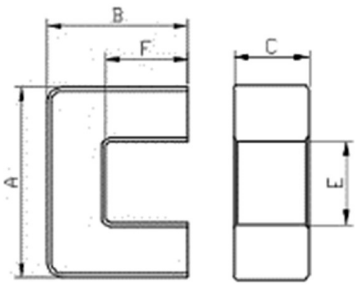


Fig.1

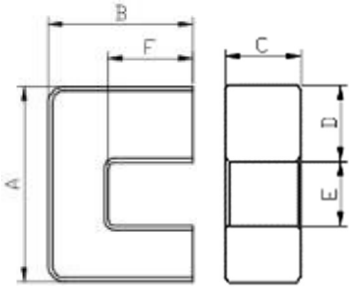


Fig.2

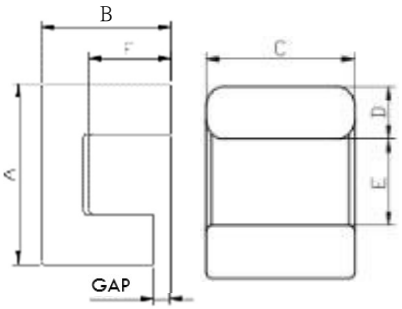


Fig.3

P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	GAP	Fig	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
UU7.8	7.80 ±0.30	4.70 ±0.15	3.50 ±0.15	2.80 ±0.15	3.00 ±0.15	2.70 ±0.15	/	2	3.04	23.58	7.75	182.84
UU9.8	9.80 ±0.20	7.20 ±0.10	2.70 ±0.20	/	4.20 ±0.20	4.20 ±0.20	/	1	4.42	34.28	7.75	265.75
UU10×7.5R	10.00 ±0.20	7.50 ±0.08	8.10 ±0.15	2.75 ±0.10	4.50 ±0.10	4.75 ±0.10	1.00 REF	3	1.64	36.64	22.28	816.14
UU10.5	10.50 ±0.30	7.85 ±0.20	5.00 ±0.30	/	5.35 ±0.20	5.35 ±0.20	/	1	3.15	40.07	12.73	510.17
UU15.7	15.70 ±0.40	9.90 ±0.20	6.00 ±0.20	/	6.60 ±0.30	6.20 ±0.25	/	1	2.03	50.57	24.95	1261.96
UU16	16.00 ±0.30	10.00 ±0.20	6.00 ±0.15	/	6.70 MIN	6.00 +0.25/-0	/	1	1.97	50.95	25.85	1317.23
UU20.5	20.50 ±0.30	13.75 ±0.25	11.00 ±0.25	/	10.50 ±0.25	9.55 ±0.25	/	1	1.43	73.22	51.04	3736.99
UU25.4	25.40 ±0.40	16.00 ±0.30	6.50 ±0.20	/	12.50 +0.7/-0	9.70 ±0.20	/	1	2.02	83.82	41.51	3479.27
UU31×19	31.00 ±0.80	19.00 ±0.20	14.00 ±0.30	/	19.00 ±0.60	13.00 ±0.30	/	1	1.30	108.85	84.00	9143.36

Note:

- This table only shows common product numbers. If the RM core you need is not listed in the above table, please do not hesitate to contact us.

备注:

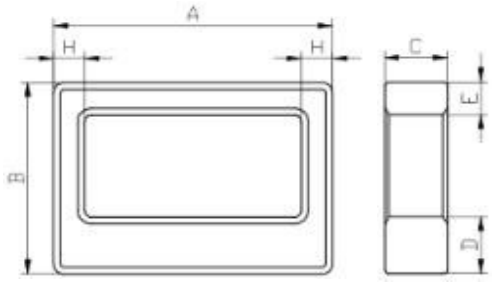
- 此表仅展示常见品号，若您需要的 RM core未標明在上表中，請不吝賜電詢問敝司業務人員。

UT CORE (OT TYPE)

Product Identification 產品識別碼

UT	20.6	C
Configuration Symbol 形状符号	Length (A)长度	Auxiliary Symbol 辅助符号

C: Epoxy Coating
P: Parylene Coating



P/N & Dimension 品号 & 尺寸	A	B	C	D	E	H	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
UT20.6	20.60 ±0.50	14.10 ±0.30	4.60 ±0.30	4.20 ±0.20	2.40 ±0.20	2.30 ±0.30	4.38	52.87	12.08	638.38
UT21.5	21.50 ±0.50	14.90 ±0.30	4.50 ±0.30	4.20 ±0.30	3.50 ±0.30	2.65 ±0.30	3.79	55.33	14.59	807.49

Note:

- This table only shows common product numbers. If the RM core you need is not listed in the above table, please do not hesitate to contact us.

备注:

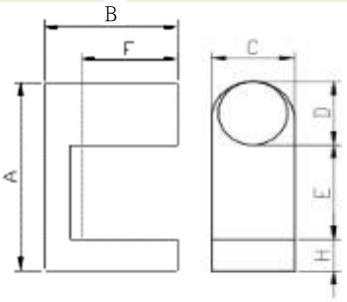
- 此表仅展示常见品号，若您需要的 RM core未標明在上表中，請不吝賜電詢問敝司業務人員。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

UR CORE

Product Identification 產品識別碼

UR	30	X	12	X	21.7
Configuration Symbol 形状符号	Length (A) 长度		Width (C) 宽度		Height (B) 高度



P/N & Dimension 品号 & 尺寸	A	B	C	D	E	F	H	C_1 (mm^{-1})	Le (mm)	Ae (mm^2)	Ve (mm^3)
UR30×12×21.7	30.00 ±0.80	21.70 ±0.20	12.00 ±0.40	10.00 ±0.30	15.00 ±0.70	15.60 MIN	5.00 ±0.20	1.68	113	68	7675

Note:

- This table only shows common product numbers. If the UR core you need is not listed in the above table, please do not hesitate to contact us.

备注:

- 此表仅展示常见品号，若您需要的 UR core未標明在上表中，請不吝賜電詢問敝司業務人員。

U CORE

Product Identification 產品識別碼

U	20.5	X	5	X	16
Configuration Symbol 形状符号	Length (A) 长度		Width (B) 高度		Height (C) 宽度

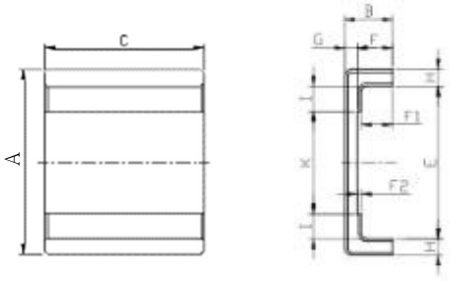


Fig.1

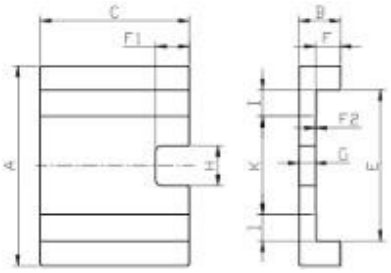


Fig.2

P/N & Dimension 品号 & 尺寸	A	B	C	E	F	F1	F2	G	H	I	K	Fig
U20.5×5×16	20.50 ±0.30	5.00 ±0.10	16.00 ±0.30	16.30 ±0.30	2.90 ±0.05	2.80 ±0.10	0.10 REF	2.10 ±0.10	2.10 ±0.10	2.15 REF	12.00 +0.5/-0.3	1
U20.5×6.8×16	20.50 ±0.30	6.90 ±0.10	16.00 ±0.30	16.30 ±0.30	4.80 ±0.05	4.70 ±0.10	0.10 REF	2.10 ±0.10	2.10 ±0.10	2.15 REF	12+0.5 +0.5/-0.3	1
U24.5×5×23.5	24.50 ±0.35	5.00 ±0.10	23.50 ±0.25	20.20 ±0.25	2.85 ±0.05	2.75 ±0.10	0.10 REF	2.15 ±0.10	2.15 ±0.10	3.10 REF	14.00 +0.5/-0.3	1
U24.5×7×23.5	24.50 ±0.35	7.10 ±0.15	23.50 ±0.25	20.20 ±0.25	4.95 ±0.05	4.85 ±0.10	0.10 REF	2.15 ±0.10	2.15 ±0.10	3.10 REF	14.00 +0.5/-0.3	1
U26.8×23.5×6.9	26.80 ±0.35	7.00 ±0.10	23.50 ±0.30	22.00 ±0.30	4.60 ±0.05	4.50 ±0.10	0.10 REF	2.40 ±0.10	2.40 ±0.10	4.00 REF	14.00 +0.5/-0.3	1
U29.7×24×6	29.70 ±0.35	6.10 ±0.10	24.00 ±0.30	24.30 ±0.30	3.40 ±0.05	3.30 ±0.10	0.10 REF	2.70 ±0.10	2.70 ±0.10	2.15 REF	20.00 +0.5/-0.3	1
U29.7×24×7.6	29.70 ±0.35	7.70 ±0.10	24.00 ±0.30	24.30 ±0.30	5.00 ±0.05	4.90 ±0.10	0.10 REF	2.70 ±0.10	2.70 ±0.10	2.15 REF	20.00 +0.5/-0.3	1
U29.7×24×8.5	29.70 ±0.35	8.50 ±0.10	24.00 ±0.30	24.30 ±0.30	5.80 ±0.05	5.70 ±0.10	0.10 REF	2.70 ±0.10	2.70 ±0.10	2.15 REF	20.00 +0.5/-0.3	1
U29.7×29×9.35	29.70 ±0.35	9.45 ±0.15	29.00 ±0.30	24.30 ±0.30	6.75 ±0.05	6.65 ±0.10	0.10 REF	2.70 ±0.10	2.70 ±0.10	2.15 REF	20.00 +0.5/-0.3	1
U33.3×28×10	33.30 ±0.35	10.10 ±0.15	28.00 ±0.30	27.90 ±0.30	7.60 ±0.05	7.50 ±0.10	0.10 REF	2.50 ±0.10	2.70 ±0.10	3.95 REF	20.00 +0.5/-0.3	1
U33.5×29×9.1	33.50 ±0.35	9.10 ±0.15	29.00 ±0.3	26.50 ±0.3	5.60 ±0.05	5.50 ±0.1	0.10 REF	3.50 ±0.1	3.50 ±0.1	3.25 REF	20.00 +0.5/-0.3	1
U33.5×29×10.5	33.50 ±0.35	10.60 ±0.15	29.00 ±0.30	26.50 ±0.30	7.10 ±0.05	7.00 ±0.10	0.10 REF	3.50 ±0.10	3.50 ±0.10	3.25 REF	20.00 +0.5/-0.3	1
U36×25×9	36.00 ±0.40	9.00 ±0.10	25.00 ±0.30	27.00 ±0.30	4.50 ±0.05	/	0.15 REF	4.50 ±0.10	4.50 ±0.10	3.50 REF	20.00 +0.5/-0.3	1

P/N & Dimension 品号 & 尺寸	A	B	C	E	F	F1	F2	G	H	I	K	Fig
U36×27×14.5	36.00 ±0.40	14.50 ±0.15	27.00 ±0.30	27.00 ±0.30	10.00 ±0.05	/	0.15 REF	4.50 ±0.10	4.50 ±0.10	3.50 REF	20.00 +0.5/-0.3	1
U36×27×16	36.00 ±0.40	16.00 ±0.15	27.00 ±0.30	27.00 ±0.30	11.50 ±0.05	/	0.15 REF	4.50 ±0.10	4.50 ±0.10	3.50 REF	20.00 +0.5/-0.3	1
U36×27×18	36.00 ±0.40	18.00 ±0.15	27.00 ±0.30	27.00 ±0.30	13.50 ±0.05	/	0.15 REF	4.50 ±0.10	4.50 ±0.10	3.50 REF	20.00 +0.5/-0.3	1
U33×25×7.6T	33.00 ±0.40	7.60 ±0.10	25.00 ±0.30	25.00 ±0.30	3.60 ±0.05	6.00 ±0.20	0.15 REF	4.00 ±0.10	7.00 ±0.20	2.50 REF	20.00 +0.5/-0.3	2
U36×25×9T	36.00 ±0.40	9.00 ±0.10	25.00 ±0.30	27.00 ±0.30	4.50 ±0.05	4.00 ±0.20	0.15 REF	4.50 ±0.10	7.00 ±0.20	3.50 REF	20.00 +0.5/-0.3	2
U36×27×7.6T	36.00 ±0.40	7.60 ±0.10	27.00 ±0.30	27.00 ±0.30	3.10 ±0.05	6.00 ±0.20	0.15 REF	4.50 ±0.10	7.00 ±0.20	3.50 REF	20.00 +0.5/-0.3	2
U36×27×8T	36.00 ±0.40	8.00 ±0.10	27.00 ±0.30	27.00 ±0.30	3.50 ±0.05	6.00 ±0.20	0.15 REF	4.50 ±0.10	7.00 ±0.20	3.50 REF	20.00 +0.5/-0.3	2
U36×27×9T	36.00 ±0.40	9.00 ±0.10	27.00 ±0.30	27.00 ±0.30	4.50 ±0.05	6.00 ±0.20	0.15 REF	4.50 ±0.10	7.00 ±0.20	3.50 REF	20.00 +0.5/-0.3	2
U36×27×11.5T	36.00 ±0.40	11.50 ±0.10	27.00 ±0.30	27.00 ±0.30	7.00 ±0.05	6.00 ±0.20	0.15 REF	4.50 ±0.10	7.00 ±0.20	3.50 REF	20.00 +0.5/-0.3	2

Note:

- This table only shows common product numbers. If the U core you need is not listed in the above table, please do not hesitate to contact us.

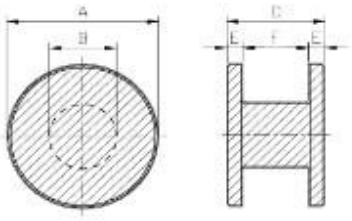
备注:

- 此表仅展示常见品号，若您需要的 U core未標明在上表中，請不吝賜電詢問敝司業務人員。

DR CORE (DRUM CORE)

Product Identification 產品識別碼

DR	2.8	X	1.6	C	B1.7	F0.5
Configuration Symbol 形状符号	Outside Diameter (A) 外径		Height (D) 高度	Auxiliary Symbol 辅助符号	Center pole Diameter (B) 中径	Pitch Width (F) 中宽



P/N & Dimension 品号 & 尺寸		A	B	D	E	F
DR2.8×1.6CB1.7F0.5	Uncoated	2.80±0.07	1.70±0.07	1.60±0.08	0.55±0.07	0.50±0.07
	Coated	2.95±0.12	1.75±0.12	1.75±0.15	0.70±0.12	0.40±0.12
DR3.8×2CB1.6F1.2	Uncoated	3.80±0.07	1.60±0.07	2.00±0.08	0.40±0.12	1.20±0.07
	Coated	3.95±0.12	1.65±0.12	2.15±0.15	0.55±0.07	1.10±0.12
DR3.9×2.5CB1.6F1.5	Uncoated	3.9±0.07	1.60±0.07	2.50±0.08	0.50±0.07	1.50±0.07
	Coated	4.05±0.12	1.65±0.12	2.65±0.15	0.65±0.12	1.40±0.12
DR4×2CB1.6F1.2	Uncoated	4.00±0.08	1.60±0.08	2.00±0.08	0.40±0.08	1.20±0.08
	Coated	4.15±0.15	1.65±0.15	2.15±0.15	0.55±0.15	1.10±0.15
DR4.1×2.14B1.65F1.14	Uncoated	4.10±0.07	1.65±0.07	2.14±0.08	0.50±0.07	1.14±0.07
	Coated	4.25±0.12	1.70±0.12	2.29±0.15	0.65±0.12	1.04±0.12
DR4.55×3.3CB1.7F1.3	Uncoated	4.55±0.08	1.70±0.08	3.30±0.08	1.00±0.08	1.30±0.08
	Coated	4.70±0.15	1.75±0.15	3.45±0.15	1.15±0.15	1.20±0.15
DR4.8×4CB2.8F2.4	Uncoated	4.80±0.10	2.80±0.10	4.00±0.10	0.80±0.10	2.40±0.10
	Coated	4.95±0.15	2.90±0.15	4.15±0.15	0.95±0.15	2.30±0.15
DR5×4CB3.0F2.5	Uncoated	5.00±0.10	3.00±0.10	4.00±0.10	0.75±0.10	2.50±0.15
	Coated	5.15±0.15	3.05±0.15	4.15±0.15	0.90±0.15	2.40±0.15
DR5.3×2.8CB2.8F1.6	Uncoated	5.30±0.10	2.80±0.10	2.80±0.10	0.60±0.10	1.60±0.10
	Coated	5.45±0.15	2.85±0.15	2.95±0.15	0.75±0.15	1.50±0.15
DR5.3×3.65CB2.8F2.3	Uncoated	5.30±0.10	2.80±0.10	3.65±0.10	0.65±0.10	2.30±0.10
	Coated	5.45±0.15	2.85±0.15	3.70±0.15	0.75±0.15	2.20±0.15

P/N & Dimension 品号 & 尺寸		A	B	D	E	F
DR5.3×3.7CB2.6F2.5	Uncoated	5.15±0.10	2.55±0.15	3.60±0.10	0.50±0.10	2.60±0.10
	Coated	5.30±0.15	2.60±0.15	3.70±0.15	0.65±0.15	2.40±0.15
DR5.5×5CB2.65F3.2	Uncoated	5.50±0.10	2.65±0.10	5.00±0.10	0.90±0.10	3.20±0.10
	Coated	5.65±0.15	2.75±0.15	5.15±0.15	1.05±0.15	3.10±0.15
DR5.6×1.35CB2.6F0.5	Uncoated	5.60±0.10	2.60±0.10	1.35±0.10	0.45±0.10	0.50±0.10
	Coated	5.75±0.15	2.70±0.15	1.50±0.15	0.55±0.15	0.40±0.15
DR6×5.5CB3.7F3.9	Uncoated	6.00±0.10	3.70±0.10	5.50±0.10	0.80±0.10	3.90±0.10
	Coated	6.15±0.15	3.80±0.15	5.65±0.15	0.95±0.15	3.80±0.15
DR6.5×3.6CB3F2	Uncoated	6.50±0.10	3.00±0.10	3.60±0.10	0.80±0.10	2.00±0.10
	Coated	6.65±0.15	3.10±0.15	3.75±0.15	0.95±0.15	1.90±0.15
DR7.5×6CB3.8F3.9	Uncoated	7.50±0.10	3.80±0.10	6.00±0.10	1.05±0.10	3.90±0.10
	Coated	7.65±0.15	3.95±0.15	6.15±0.15	1.20±0.15	3.80±0.15
DR7.7×4.8CB4.15F3.4	Uncoated	7.70±0.10	4.15±0.10	4.80±0.10	0.70±0.10	3.40±0.10
	Coated	7.85±0.15	4.25±0.15	4.95±0.15	0.85±0.15	3.30±0.15
DR7.9×7.1CB5.4F4.9	Uncoated	7.75±0.10	5.30±0.10	6.95±0.10	1.00±0.10	5.00±0.10
	Coated	7.90±0.20	5.40±0.15	7.10±0.15	1.10±0.15	4.90±0.15
DR8×9.1CB5F7.5	Uncoated	8.00±0.10	5.00±0.10	9.10±0.10	0.80±0.10	7.50±0.10
	Coated	8.15±0.20	5.10±0.15	9.25±0.20	0.95±0.15	7.40±0.15
DR8.38×2CB4F1	Uncoated	8.38+0/-0.30	4.00±0.10	2.00±0.10	0.50±0.10	1.00±0.10
	Coated	8.38±0.20	4.10±0.15	2.15±0.15	0.65±0.15	0.90±0.15
DR8.38×4.2CB3.2F2.4	Uncoated	8.38+0/-0.30	3.20±0.15	4.20±0.15	0.90±0.15	2.40±0.15
	Coated	8.38±0.20	3.30±0.20	4.35±0.20	1.05±0.20	2.30±0.20
DR8.38×10.2CB4.5F8	Uncoated	8.38+0/-0.30	4.50±0.15	10.20±0.15	1.10±0.15	8.00±0.15
	Coated	8.38±0.20	4.60±0.20	10.35±0.20	1.25±0.20	7.90±0.20
DR8.38×10.2CB4.5F8	Uncoated	8.38+0/-0.30	4.50±0.15	10.20±0.15	1.10±0.15	8.00±0.15
	Coated	8.38±0.20	4.60±0.20	10.35±0.20	1.25±0.20	7.90±0.20
DR8.4×4.3CB3.5F1.7	Uncoated	8.40±0.15	3.50±0.15	4.30±0.15	1.30±0.15	1.70±0.15
	Coated	8.55±0.20	3.60±0.20	4.45±0.20	1.45±0.20	1.60±0.20
DR9.6×6CB5.5F3.8	Uncoated	9.60±0.15	5.50±0.15	6.00±0.15	1.10±0.15	3.80±0.15
	Coated	9.75±0.20	5.60±0.20	6.15±0.20	1.25±0.15	3.70±0.15
DR9.7×6.9CB5.45F3.4	Uncoated	9.70±0.10	5.45±0.15	6.90±0.15	1.75±0.15	3.40±0.15

P/N & Dimension 品号 & 尺寸		A	B	D	E	F
	Coated	9.85±0.15	5.55±0.20	7.05±0.20	1.90±0.20	3.30±0.20
DR9.85×4CB5.2F1.8	Uncoated	9.85±0.10	5.20±0.15	4.00±0.15	1.10±0.15	1.80±0.15
	Coated	10.00±0.20	5.30±0.20	4.15±0.20	1.25±0.20	1.70±0.20
DR9.85×5.2CB5.2F3	Uncoated	9.85±0.10	5.20±0.15	5.20±0.15	1.10±0.15	3.00±0.15
	Coated	10.00±0.20	5.30±0.20	5.35±0.20	1.25±0.20	2.90±0.20
DR9.85×7CB6.2F4.9	Uncoated	9.85±0.10	6.20±0.15	7.00±0.15	1.05±0.15	4.90±0.15
	Coated	10.00±0.20	6.30±0.20	7.15±0.20	1.20±0.20	4.80±0.20
DR9.85×9CB6.5F6.5	Uncoated	9.85±0.10	6.50±0.15	9.00±0.15	1.25±0.15	6.50±0.15
	Coated	10.00±0.20	6.60±0.20	9.15±0.20	1.40±0.20	6.40±0.20
DR9.85×11CB6.2F8	Uncoated	9.85±0.10	6.20±0.15	11.00±0.15	1.50±0.15	8.00±0.15
	Coated	10.00±0.20	6.30±0.20	11.15±0.20	1.65±0.20	7.90±0.20
DR9.9×7CB6.1F4.8	Uncoated	9.75±0.10	6.00±0.10	6.90±0.15	1.05±0.10	4.90±0.10
	Coated	9.90±0.20	6.10±0.15	7.00±0.20	1.20±0.15	4.80±0.15
DR10×7CB5.9F4.9	Uncoated	10.00±0.10	5.90±0.15	7.00±0.15	1.05±0.15	4.90±0.15
	Coated	10.15±0.20	6.00±0.20	7.15±0.20	1.20±0.20	4.80±0.20
DR10×9CB5.7F7	Uncoated	10.00±0.10	5.70±0.15	9.00±0.15	1.00±0.15	7.00±0.15
	Coated	10.15±0.20	5.80±0.20	9.15±0.20	1.15±0.20	6.90±0.20
DR11.18×4.2CB5.08F2.5	Uncoated	11.18±0.15	5.08±0.15	4.20±0.15	0.85±0.15	2.50±0.15
	Coated	10.33±0.20	5.18±0.20	4.35±0.20	1.00±0.20	2.40±0.20
DR11.7×6.8CB6.8F4.8	Uncoated	11.70±0.15	6.80±0.15	6.80±0.15	1.00±0.15	4.80±0.15
	Coated	11.85±0.25	6.90±0.20	6.95±0.20	1.15±0.20	4.70±0.20
DR11.7×9.85CB6.5F6.5	Uncoated	11.70±0.15	6.50±0.15	9.85±0.15	1.675±0.15	6.50±0.15
	Coated	11.85±0.25	6.60±0.20	10.00±0.20	1.82±0.20	6.40±0.20
DR11.7×13.2CB7.5F10.2	Uncoated	11.70±0.15	7.50±0.15	13.20±0.15	1.50±0.15	10.20±0.15
	Coated	11.85±0.25	7.60±0.20	13.35±0.25	1.65±0.20	10.10±0.20
DR12×8.05CB6.75F5.3	Uncoated	11.85±0.15	6.65±0.15	7.90±0.15	1.25±0.15	5.40±0.15
	Coated	12.00±0.25	6.75±0.20	8.05±0.20	1.40±0.20	5.30±0.20
DR12.7×5.6CB5.5F3.2	Uncoated	12.50±0.20	5.40±0.15	5.60±0.15	1.20±0.15	3.20±0.15
	Coated	12.65±0.30	5.50±0.15	5.75±0.20	1.35±0.10	3.10±0.20
DR14.7×7.2CB8.4F4.15	Uncoated	14.65±0.20	8.30±0.15	7.05±0.15	1.40±0.15	4.25±0.15
	Coated	14.80±0.30	8.40±0.20	7.20±0.20	1.55±0.20	4.15±0.20

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com

P/N & Dimension 品号 & 尺寸		A	B	D	E	F
DR15×13.5CB9F8.5	Uncoated	15.00±0.25	9.00±0.20	13.50±0.20	2.50±0.20	8.50±0.20
	Coated	15.15±0.35	9.15±0.30	13.65±0.30	2.65±0.30	8.40±0.30
DR16×17.6CB10F11.5	Uncoated	16.00±0.30	10.00±0.20	17.60±0.20	3.05±0.20	11.50±0.20
	Coated	16.15±0.40	10.15±0.30	17.75±0.30	3.20±0.30	11.40±0.30
DR17.78×8.1CB8.1F4.8	Uncoated	17.78±0.35	8.10±0.20	8.10±0.20	1.65±0.20	4.80±0.20
	Coated	17.93±0.45	8.20±0.30	8.25±0.30	1.80±0.30	4.70±0.30

Note:

- This table only shows common product numbers. If the DR core you need is not listed in the above table, please do not hesitate to contact us.
- DR CORE can be used alone or can be combined with SP/SRI CORE to achieve different electrical characteristics according to customer needs.

备注:

- 此表仅展示常见品号，若您需要的 DR core未標明在上表中，請不吝賜電詢問敝司業務人員。
- DR CORE可单独使用，也可根据客户需求，搭配 SP/SRI CORE 达成不同的电性特气要求。

DRH CORE (DRUM CORE WITH HOLE)

Product Identification 產品識別碼

DRH	14	X	20	RC	B8.8	F14
Configuration Symbol 形状符号	Outside Diameter (A) 外径		Height (D) 高度	Auxiliary Symbol 辅助符号	Center pole Diameter (B) 中径	Pitch Width (F) 中宽

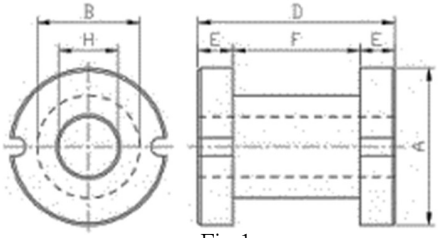


Fig.1

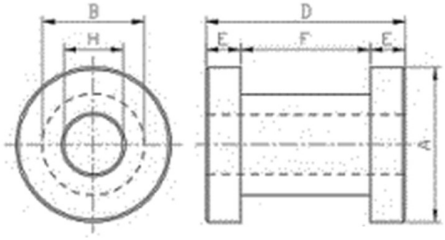


Fig.2

P/N & Dimension 品号 & 尺寸		A	B	D	E	F	H	Fig
DRH14×20RCB8.8F14	Uncoated	13.40±0.30	8.80±0.20	20.00±0.50	3.00±0.20	14.00±0.30	5.10±0.30	1
	Coated	14.20MAX	9.50MAX	21.00MAX	3.70MAX	13.20MIN	4.30MIN	
DRH14×20RCB8.8F12.4	Uncoated	13.80±0.30	8.80±0.20	20.00±0.50	3.80±0.20	12.40±0.30	3.30±0.20	1
	Coated	14.70MAX	9.50MAX	21.00MAX	4.50MAX	11.70MIN	2.60MIN	
DRH18×20RCB11F12.5	Uncoated	18.00±0.50	11.00±0.30	20.00±0.60	3.75±0.25	12.50±0.40	4.30±0.30	1
	Coated	18.90MAX	11.70MAX	21.00MAX	4.50MAX	11.60MIN	3.60MIN	
DRH18×20.3RCB11F12.3	Uncoated	18.00±0.50	11.00±0.30	20.30±0.60	4.00±0.25	12.30±0.40	4.30±0.30	1
	Coated	18.90MAX	11.70MAX	21.30MAX	4.75MAX	11.40MIN	3.60MIN	
DRH19×20RCB11F13	Uncoated	19.00±1.00	11.00±0.30	20.00±1.00	3.50±0.25	13.00±0.50	4.00±0.30	1
	Coated	20.50MAX	11.80MAX	21.50MAX	4.20MAX	12.00MIN	3.20MIN	
DRH28×22C	Uncoated	28.00±1.00	17.00±0.60	22.00±1.00	3.50±0.30	15.00±0.50	5.00±0.30	2
	Coated	29.50MAX	18.10MAX	23.50MAX	4.20MAX	14.00MIN	4.20MIN	

Note:

- This table only shows common product numbers. If the DRH core you need is not listed in the above table, please do not hesitate to contact us.
- DRH CORE can be used alone or can be combined with SP/SRI CORE to achieve different electrical characteristics according to customer needs.

备注:

- 此表仅展示常见品号，若您需要的 DRH core未標明在上表中，請不吝賜電詢問敝司業務人員。
- DRH CORE可单独使用，也可根据客户需求，搭配 SP/SRI CORE 达成不同的电性特气要求。

如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605 E-mail：sales6@takferrite.com

DRH CORE (DRUM CORE WITH HOLE)

Product Identification 產品識別碼

DRH	14	X	20	RC
Configuration Symbol 形状符号	Outside Diameter (A) 外径		Height (D) 高度	Auxiliary Symbol 辅助符号

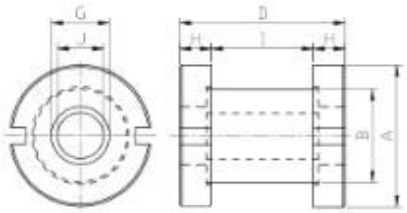


Fig.1

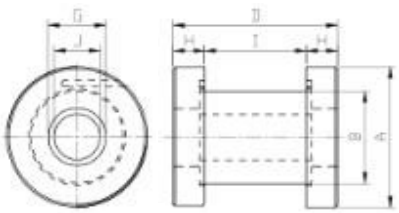


Fig.2

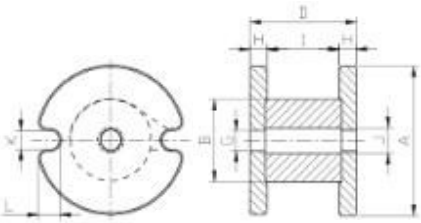


Fig.3

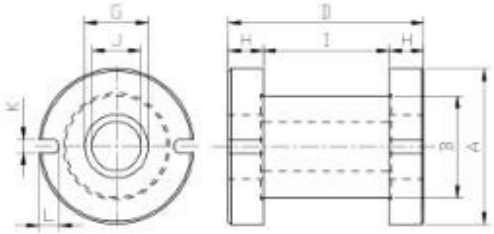


Fig.4

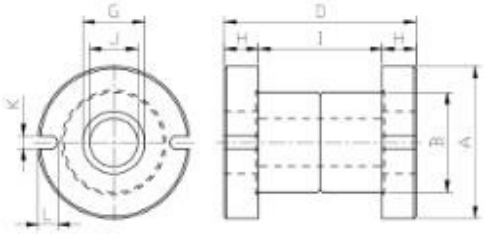


Fig.5

P/N & Dimension 品号 & 尺寸		A	B	D	G	H	I	J	Fig
DRH18×20RC	Uncoated	18.00±0.40	11.00±0.30	20.00±0.60	4.75±0.30	3.75±0.20	12.50±0.50	3.20±0.20	1
	Coated	18.90MAX	11.80MAX	21.10MAX	4.15MIN	4.45MAX	11.50MIN	2.50MIN	
DRH18×22RC	Uncoated	18.00±0.40	11.00±0.30	22.00±1.00	4.75±0.30	3.75±0.20	14.50±0.50	3.20±0.20	1
	Coated	18.90MAX	11.80MAX	23.40MAX	4.15MIN	4.45MAX	13.50MIN	2.50MIN	
DRH18.5×21RC	Uncoated	18.50±0.80	11.00±0.50	21.00±1.00	5.00±0.30	4.50±0.30	12.00±0.50	3.50±0.20	4
	Coated	19.60MAX	11.80MAX	22.30MAX	4.40MIN	5.10MAX	11.20MIN	3.00MIN	
DRH19×19RC	Uncoated	19.00±0.60	12.0+0.5/-0.1	19.00±0.60	6.40±0.30	3.50±0.20	12.00±0.50	5.40±0.35	1
	Coated	20.10MAX	13.00MAX	20.10MAX	5.60MIN	4.20MAX	11.00MIN	4.60MIN	
DRH20×19C	Uncoated	20.00±0.40	13.00±0.30	19.00±0.60	6.30±0.30	3.00±0.30	13.00±0.50	5.30±0.30	2
	Coated	21.00MAX	13.95MAX	20.00MAX	5.50MIN	3.70MAX	12.20MIN	4.50MIN	
DRH20×22.5RC	Uncoated	20.00±0.80	13.00±0.30	22.50±0.80	6.30±0.30	3.10±0.20	16.30±0.50	5.35±0.20	1
	Coated	21.45MAX	13.95MAX	23.95MAX	5.50MIN	3.80MAX	15.35MIN	4.70MIN	
DRH22.4×14C	Uncoated	22.40±0.80	13.00±0.30	14.00±0.80	6.30±0.30	3.00±0.30	8.00±0.50	5.35±0.30	2
	Coated	23.70MAX	13.95MAX	15.30MAX	5.50MIN	3.70MAX	7.00MIN	4.70MIN	
DRH22.8×14RC	Uncoated	22.80±1.00	13.00±0.30	14.00±0.80	6.35±0.30	3.10±0.30	8.00±0.50	5.35±0.30	1
	Coated	24.30MAX	13.95MAX	15.30MAX	5.50MIN	3.80MAX	7.00MIN	4.70MIN	

P/N & Dimension 品号 & 尺寸		A	B	D	G	H	I	J	Fig
DRH22.8×18C	Uncoated	22.80±0.80	13.00±0.30	18.00±0.80	6.35±0.30	3.00±0.30	12.00±0.50	5.50±0.30	2
	Coated	24.10MAX	13.95MAX	19.30MAX	5.55MIN	3.70MAX	12.00MIN	4.70MIN	
DRH22.8×19C	Uncoated	22.80±0.80	13.00±0.30	19.00±0.80	6.30±0.30	3.00±0.30	13.00±0.50	5.30±0.30	2
	Coated	24.10MAX	13.95MAX	20.30MAX	5.55MIN	3.70MAX	12.00MIN	4.70MIN	
DRH22.8×25RC	Uncoated	22.80±1.00	13.00±0.30	25.00±0.80	6.35±0.30	3.50±0.30	18.00±0.50	5.35±0.30	1
	Coated	24.30MAX	13.95MAX	26.60MAX	5.50MIN	4.30MAX	16.90MIN	4.65MIN	
DRH24×20RC	Uncoated	24.00±0.80	13.00±0.30	20.00±0.80	6.30±0.30	4.00±0.20	12.00±0.50	5.35±0.20	1
	Coated	25.45MAX	13.75MAX	21.45MAX	5.55MIN	4.65MAX	11.05MIN	4.60MIN	
DRH24×24RC	Uncoated	24.00±0.80	13.00±0.30	24.00±0.80	6.30±0.30	4.00±0.20	16.00±0.50	5.35±0.20	1
	Coated	25.45MAX	13.80MAX	25.45MAX	5.55MIN	4.80MAX	15.10MIN	4.60MIN	
DRH25×21RC	Uncoated	25.00±1.00	13.50±0.50	21.00±1.00	5.00±0.30	4.50±0.30	12.00±0.50	3.50±0.20	4
	Coated	26.50MAX	14.50MAX	22.50MAX	4.20MIN	5.30MAX	11.00MIN	2.80MIN	
DRH25×25RC	Uncoated	25.00±1.00	13.50±0.50	25.00±1.00	5.00±0.30	4.50±0.30	16.00±0.50	3.50±0.20	4
	Coated	26.50MAX	14.50MAX	26.50MAX	4.20MIN	5.30MAX	15.00MIN	2.80MIN	
DRH26×20C	Uncoated	25.50±0.50	13.00±0.50	20.00±1.00	6.35±0.30	4.00±0.30	12.00±0.80	5.35±0.20	2
	Coated	26.80MAX	14.20MAX	21.90MAX	5.55MIN	4.80MAX	10.70MIN	4.55MIN	
DRH26×20RC	Uncoated	26.00±1.00	13.00±0.30	19.80±0.60	6.30±0.30	3.50±0.30	12.60±0.60	5.35±0.20	1
	Coated	27.50MAX	13.90MAX	21.50MAX	5.50MIN	4.50MAX	11.50MIN	4.55MIN	
DRH26×25RC	Uncoated	26.00±1.00	16.00±0.50	25.00±1.00	6.30±0.30	4.00±0.30	17.00±0.80	5.35±0.20	1
	Coated	27.50MAX	17.30MAX	26.50MAX	5.50MIN	4.50MAX	15.70MIN	4.55MIN	
DRH28×22C	Uncoated	28.00±1.00	16.90±0.50	22.00±1.00	6.40±0.30	4.00±0.30	14.00±0.60	5.00±0.30	2
	Coated	29.50MAX	17.60MAX	23.50MAX	5.50MIN	4.80MAX	13.00MIN	4.20MIN	
DRH28×22RC	Uncoated	28.00±1.00	16.90±0.50	22.00±1.00	6.40±0.30	4.00±0.30	14.00±0.60	5.00±0.30	1
	Coated	29.50MAX	17.60MAX	23.50MAX	5.50MIN	4.80MAX	13.00MIN	4.20MIN	
DRH28×25RC	Uncoated	28.00±1.00	17.00±0.50	25.00±1.00	6.30±0.30	4.00±0.30	17.00±0.80	4.50±0.25	1
	Coated	29.50MAX	18.00MAX	26.50MAX	5.50MIN	4.80MAX	15.70MIN	3.70MIN	
DRH30×25C	Uncoated	30.00±1.00	13.00±0.30	25.00±1.00	6.30±0.30	4.00±0.30	17.00±0.80	5.30±0.30	2
	Coated	32.00MAX	13.80MAX	26.50MAX	5.50MIN	4.80MAX	15.70MIN	4.50MIN	
DRH35×25RC	Uncoated	35.00±0.80	21.00±0.50	25.00±0.80	8.00±0.40	3.50±0.30	18.00±0.60	4.40±0.20	1
	Coated	36.60MAX	21.65MAX	26.45MAX	7.15MIN	4.05MAX	16.8MIN	4.00MIN	
DRH35×25RC-B B19F17	Uncoated	35.00±0.50	19.00±0.30	25.00±0.50	4.80±0.20	4.00±0.15	17.00±0.35	5.30±0.20	3
	Coated	36.40MAX	20.00MAX	26.00MAX	4.50±0.30	4.60MAX	16.00MIN	5.30±0.20	
DRH35×25C B13 F17	Uncoated	35.00±1.00	13.00±0.30	25.00±1.00	6.35±0.30	4.00±0.30	17.00±0.60	5.30±0.30	2
	Coated	36.50MAX	13.80MAX	26.50MAX	5.550MIN	4.80MAX	15.90MIN	4.50MIN	
DRH35×27RC B21F18	Uncoated	35.00±1.00	21.00±0.60	27.00±1.00	8.00±0.40	4.50±0.30	18.00±0.60	4.00±0.30	1
	Coated	36.50MAX	22.10MAX	28.50MAX	7.10MIN	5.20MAX	16.90MIN	3.20MIN	

P/N & Dimension 品号 & 尺寸		A	B	D	G	H	I	J	Fig
DRH35×35RC	Uncoated	35.00±1.00	21.00±0.60	35.00±1.00	8.00±0.40	3.50±0.30	28.00±0.60	4.00±0.30	1
	Coated	36.50MAX	22.10MAX	36.50MAX	7.10MIN	4.30MAX	26.90MIN	3.20MIN	
DRH36×18RC	Uncoated	36.00±1.00	21.00±0.60	18.00±0.80	7.00±0.30	4.50±0.30	9.00±0.40	5.00±0.30	4
	Coated	37.50MAX	22.10MAX	19.50MAX	6.20MIN	5.30MAX	8.10MIN	4.20MIN	
DRH36×27RC	Uncoated	36.00±1.00	21.00±0.60	27.00±1.00	7.00±0.30	4.50±0.30	18.00±0.80	5.00±0.30	4
	Coated	37.50MAX	22.10MAX	28.50MAX	6.20MIN	5.30MAX	16.70MIN	4.20MIN	
DRH36×36RC	Uncoated	36.00±1.00	21.00±0.60	36.00±1.00	7.00±0.30	4.50±0.30	27.00±0.80	5.00±0.30	4
	Coated	37.50MAX	22.10MAX	37.50MAX	6.20MIN	5.30MAX	25.70MIN	4.20MIN	
DRH40×35C	Uncoated	40.00±1.00	20.00±0.60	35.00±1.00	6.50±0.30	6.00±0.30	23.00±0.60	5.60±0.30	2
	Coated	41.50MAX	21.10MAX	36.50MAX	5.70MIN	6.80MAX	21.90MIN	4.80MIN	
DRH45×35RC	Uncoated	45.00±1.2	27.40±0.7	35.00±1.00	9.00±0.30	4.70±0.20	25.60±0.80	6.50±0.30	1
	Coated	47.00MAX	28.50MAX	36.50MAX	8.00MIN	5.40MAX	24.50MIN	5.70MIN	
DRH46×18RC	Uncoated	46.00±1.00	27.00±0.60	18.00±1.00	9.50±0.40	5.00±0.30	8.00±0.30	7.00±0.30	4
	Coated	47.50MAX	28.10MAX	19.50MAX	8.60MIN	5.80MAX	7.10MIN	6.20MIN	
DRH46×36RC	Uncoated	46.00±1.00	27.00±0.60	36.00±1.00	9.50±0.40	5.00±0.30	26.00±0.80	7.00±0.30	4
	Coated	47.50MAX	28.10MAX	37.50MAX	8.60MIN	5.80MAX	24.70MIN	6.20MIN	
DRH55×20RC	Uncoated	55.00±1.20	32.50±0.60	20.00±1.00	9.50±0.40	6.00±0.30	8.00±0.30	7.00±0.30	4
	Coated	56.70MAX	33.60MAX	21.50MAX	8.60MIN	6.80MAX	7.35MIN	6.20MIN	
DRH55×37RC	Uncoated	55.00±1.20	32.50±0.60	37.00±1.00	9.50±0.40	6.00±0.30	25.00±0.80	7.00±0.30	4
	Coated	56.70MAX	33.60MAX	38.50MAX	8.60MIN	6.80MAX	23.70MIN	6.20MIN	
DRH55×63RC	Uncoated	55.00±1.20	32.50±0.60	63.00±1.50	9.50±0.40	5.00±0.30	53.00±0.30	7.00±0.30	5
	Coated	56.70MAX	33.60MAX	65.00MAX	8.60MIN	5.80MAX	51.50MIN	6.20MIN	

Note:

- This table only shows common product numbers. If the DRH core you need is not listed in the above table, please do not hesitate to contact us.
- DRH CORE can be used alone or can be combined with SP/SRI CORE to achieve different electrical characteristics according to customer needs.

备注:

- 此表仅展示常见品号，若您需要的 DRH core 未標明在上表中，請不吝賜電詢問敝司業務人員。
- DRH CORE 可单独使用，也可根据客户需求，搭配 SP/SRI CORE 达成不同的电性特气要求。

AP CORE

Product Identification 產品識別碼

AP	18	X	18	X	3.5
Configuration Symbol 形状符号	Length (A1) 长度		Width (A2) 宽度		Height (D) 高度

Fig.1

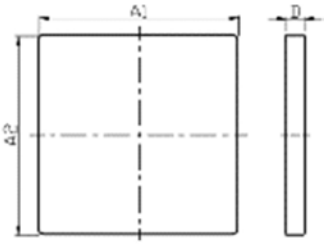


Fig.2

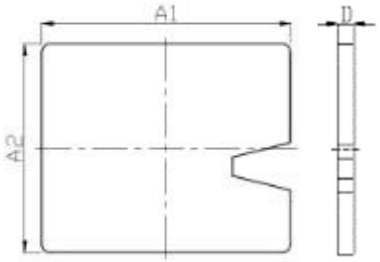


Fig.3

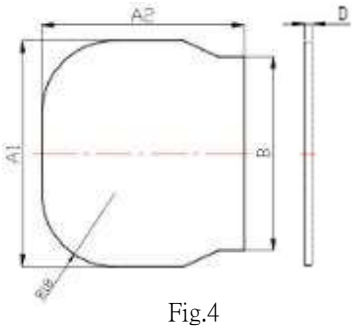


Fig.4

P/N & Dimension 品号 & 尺寸	A1	A2/B	D	Fig
AP18×18×3.5	18.00+0/-0.70	18.00+0/-0.70	3.50±0.15	2
AP19×18.9×3.2	19.00±0.30	18.90±0.30	3.20±0.30	1
AP23×2×3	23.00+0/-0.50	2.00+0/-0.20	3.00+0/-0.20	1
AP25×12×4	25.00±0.50	12.00±0.50	4.00+0.50/-0	1
AP25×25×4.6	25.00±0.50	25.00±0.50	4.60±0.15	2
AP31×15×4.6	31.00±0.50	15.00±0.50	4.60±0.15	1
AP38×7×3.75	38.00+0/-1.00	7.00±0.20	3.75±0.10	1
AP41.5×37.5×2.5	41.50±0.40	37.50±0.40	2.50±0.10	3
AP45×15×5	45.00±0.80	15.00±0.50	5.00±0.15	1
AP48×32×0.4	48.00±0.80	32.00±0.50	0.40MAX	1
AP50×12×3	50.00±0.80	12.00±0.20	3.00±0.15	1
AP50×18×3.5	50.00±1.00	18.00±0.50	3.50±0.15	1
AP50×50×1	50.00±0.80	50.00±0.80	1.00±0.10	2
AP52×11×4.5	52.00+0/-2.00	11.00+0/-0.45	4.50+0/-0.30	1
AP53×53×2.5	53.00±0.80	53.00±0.80	2.50±0.10	2
AP53.3×53.3×2.5	53.30±0.80	53.30±0.80	2.50±0.10	2
AP56×50×0.8	56.00±0.60	50.00/48.00±0.50	0.80±0.10	4
AP60×12×6	60.00±1.00	12.00±0.50	6.00±0.30	1
AP60×15×4.6	60.00+0.20/-0.80	15.20±0.25	4.65±0.15	1
AP60×15×5	60.00±1.00	15.00±0.50	5.00±0.20	1
AP70×70×5	70.00±1.00	70.00±1.00	5.00±0.30	2
AP76×61.5×20	76.00±1.00	61.50±1.00	20.00±0.50	1
AP80×4.3×2.8	80.00±1.50	4.30±0.10	2.80±0.10	1
AP105.5×60×11.5	105.00±1.50	60.00±0.80	11.50±0.50	1
AP105×105×20	105.00±1.50	105.00±1.50	20.00±0.50	2

主要磁芯厂商功率材料排号对照表
CROSS-REFERENCE TABLE OF POWER MATERIAL GRADES

TAK 铁研	TP40	TP44	TP45	TM80	TM50A	TM61	TM63	TM71	TM81	TM82
TDK	PC40	PC44	PC45	PC95		PC200				PC33
EPCOS	N67	N87		N95				N45		
FERROXCUBE	3C90	3C94		3C95	3C98	3F45		3B46	3C97	3C92
Magnetics	P	R		T						
Fair-rite		78		95	97		80			
FDK	6H10	6H40	6H42	6H60	7H10					4H45
HITCHIMetal	ML24D	ML25D		ML30D		ML91S	ML93S	MT30D		MB19D
JFE	MB3	MB4		MBT2	MBF4	MC2				MB1H
ACME 越峰	P4	P41	P48	P45	P52	P61	P63	N42	P451	P491
HuohYow 华佑	KL40	KL44		KL33W				KM30T		
TDG 天通	TP4	TP4A		TPW33		TP5E		TD5B	TPG33	TPB16
DMEGC 东磁	DMR40	DMR44		DMR95		DMR51	DMR53	DMR71	DMR96	DMR28
东阳光	HE4	HE44		HE6		HE5E	HE5S			
SAMWHA	PL7	PL11		PL9				ST30B		
ISU	PM7	PM11		PM9				BM30		

主要磁芯厂商高导材料牌号对照表
CROSS-REFERENCE TABLE OF HIGH PERMEABILITY MATERIAL GRADES

TAK 铁研	E02	T05	T07	T10	T12
TDK		HP5	H5B2	H5C2	H5C4
EPCOS	N48	T35	T37	T38	T42
FERROXCUBE	3N1	3E27	3E26	3E5	3E6
Magnetics	V	J		W	
Fair-rite	31	75		76	
FDK	2H03	2H06	2H07	2H10	
HITCHI		MQ53D	MP70D	MP10T	
JFE		MA055	MA070	MA100	MA120
ACME 越峰	N5	A05	A07	A10	A12
HuohYow 华佑	KM25	KM50	KM70	KM100	
TDG 天通	TH2	TL5	TL7	TL10	TS13
DMEGC 东磁	DMR70	R5K	R7K	R10K	R12K
东阳光		HL5	HL7	HL10	HL12
SAMWHA		SM50	SM70	SM100	
ISU		HM2A	HM3	HM5A	

磁性材料的相关国际标准 IEC/GB PUBLICATIONS ON SOFT FERRITE

TAK 相关工艺与参数量测标准主要遵循和参考了 IEC 和 GB 的相关规定，以确保产品在生产和测试过程中符合国际和国家标准，提高产品的质量和一致性。

The process and parameter measurement standards related to TAK primarily adhere to and reference the relevant regulations of IEC and GB to ensure compliance with international and national standards during production and testing, thereby enhancing product quality and consistency.

- IEC 60133：Dimensions of pot cores made of magnetic oxides and associated parts.（磁氧化物制成的罐形磁芯及相关部件的尺寸。）
- IE 60205：Calculations of the effective parameters of magnetic piece parts.（磁性零件的有效参数计算。）
- IEC 60401-1：Terms and nomenclature for cores made of magnetically soft ferrites. Part 1: Terms used for physical irregularities.（磁性软铁氧体磁芯的术语和命名规则。第1部分：用于物理不规则性的术语。）
- IEC 60401-2：Terms and nomenclature for cores made of magnetically soft ferrites. Part 2: Reference of dimensions.（磁性软铁氧体磁芯的术语和命名规则。第2部分：尺寸参考。）
- IEC 60401-3：Terms and nomenclature for cores made of magnetically soft ferrites. Part 3: Guidelines on the format of data appearing in manufacturers' catalogues of transformers and inductor cores.（磁性软铁氧体磁芯的术语和命名规则。第3部分：变压器和电感器磁芯制造商目录中数据格式的指南。）
- IEC 60424-1 (GB/T 13269-2011)：Ferrite cores. Guides on the limits of surface irregularities. Part 1: General specification.（铁氧体磁芯。表面不规则性限制指南。第1部分：一般规范。）
- IEC 60424-2 (GB/T 13269.2-2011)：Guidance of the limits of surface irregularities of ferrite cores. Part 2: RM Cores.（铁氧体磁芯表面不规则性限制指南。第2部分：RM磁芯。）
- IEC 60424-3 (GB/T 13269.3-2011)：Ferrite cores. Guide on the limits of surface irregularities. Part 3: ETD cores and E cores.（铁氧体磁芯。表面不规则性限制指南。第3部分：ETD磁芯和E磁芯。）
- IEC 60424-4 (GB/T 13269.4-2011)：Ferrite cores. Guide on the limits of surface irregularities. Part 4: Ring Cores.（铁氧体磁芯。表面不规则性限制指南。第4部分：环形磁芯。）
- IEC 60647：Dimensions for magnetic oxide cores intended for use in power supplies (EC Cores).（用于电源的磁氧化物磁芯的尺寸（EC磁芯）。）
- IEC 60732：Measuring methods for cylinder cores, tubes cores and screw cores of magnetic oxides.（磁氧化物的圆柱磁芯、管状磁芯和螺旋磁芯的测量方法。）
- IEC 61007：Transformers and inductors for use in telecommunication equipment. Measuring methods and test procedures.（用于电信设备的变压器和电感器。测量方法和测试程序。）
- IEC 61185：Magnetic oxide cores (ETD cores) intended for use in power supply applications. Dimensions.（用于电源应用的磁氧化物磁芯（ETD磁芯）的尺寸。）
- IEC 61247：PM cores made of magnetic oxide and associated parts. Dimensions.（由磁氧化物制成的PM磁芯及相关部件的尺寸。）

- IEC 61332：Soft ferrite material classification.（软铁氧体材料分类。）
- IEC 61333：Marking on U and E ferrite cores.（U型和E型铁氧体磁芯的标记。）
- IEC 61596：Magnetic oxide EP cores and associated parts for use in inductors and transformers. Dimensions.（用于电感器和变压器的磁氧化物EP磁芯及相关部件的尺寸。）
- IEC/TR 61604：Dimensions of uncoated ring cores of magnetic oxides.（未涂覆磁氧化物的环形磁芯的尺寸。）
- IEC 61631：Test method for the mechanical strength of cores made of magnetic oxides.（磁氧化物制成的磁芯的机械强度测试方法。）
- IEC 62024-1：High Frequency inductive components. Electrical characteristics and measuring methods. Part 1: Nanohenry range chip inductors.（高频电感元件。电性能和测量方法。第1部分：纳亨利范围芯片电感器。）
- IEC 62044-1：Cores made of soft magnetic materials. Measuring methods. Part 1: Generic specifications.（软磁性材料制成的磁芯。测量方法。第1部分：一般规格。）
- IEC 62044-2：Cores made of soft magnetic materials. Measuring methods. Part 2: Magnetic properties at low excitation level.（软磁性材料制成的磁芯。测量方法。第2部分：低激励水平下的磁性能。）
- IEC 62044-3：Cores made of soft magnetic materials. Measuring methods. Part 3: Magnetic properties at high excitation level.（软磁性材料制成的磁芯。测量方法。第3部分：高激励水平下的磁性能。）
- IEC 62211：Inductive components. Reliability management.（电感元件。可靠性管理。）
- IEC 62317-1 (GB/T 32134.1-2015)：Ferrite cores-Dimensions- Part 1: General Specification.（铁氧体磁芯-尺寸-第1部分：一般规范。）
- IEC 62317-4 (GB/T 32134.4-2015)：Ferrite cores- Dimensions- Part 4: RM-cores and associated parts.（铁氧体磁芯-尺寸-第4部分：RM磁芯及相关部件。）
- IEC 62317-7 (GB/T 32134.7-2015)：Ferrite cores- Dimensions-Part 7: EER- cores.（铁氧体磁芯-尺寸-第7部分：EER磁芯。）
- IEC 62317-8 (GB/T 32134.8-2015)：Ferrite cores-Dimensions-Part 8: E-cores.（铁氧体磁芯-尺寸-第8部分：E磁芯。）
- IEC 62317-9 (GB/T 32134.9-2015)：Ferrite cores-Dimensions-Part 9: Planar cores. Amendment 1.（铁氧体磁芯-尺寸-第9部分：平面磁芯。修订版1。）
- IEC/PAS 62323：Dimension of half pot cores of magnetic oxides for inductive proximity switches.（用于感应近距离开关的磁氧化物半罐形磁芯的尺寸。）
- IEC 62358 (GB/T 15268-2008)：Ferrite cores. Standard inductance factor (Al) and its tolerance.（铁氧体磁芯。标准电感系数（Al）及其公差。）
- IEC 62398：Ferrite cores. Technology approval schedule (TAS).（铁氧体磁芯。技术批准计划（TAS）。）

AWG 线径表 WIRE SIZES TABLE

AWG: In the American Wire Gauge (AWG) system, wire size diameters can be calculated by applying the formula $D(AWG)=.005 \cdot 92^{((36-AWG)/39)}$inch. For the 00, 000, 0000 etc. gauges you use -1, -2, -3, which makes more sense mathematically than "double naught." This means that in American wire gage every 6 gauge decrease gives a doubling of the wire diameter, and every 3 gauge decrease doubles the wire cross sectional area. Similar to dB in signal and power levels. An approximate but accurate enough form of this formula contributed by Mario Rodriguez is $D = .460 * (57/64)^{(awg +3)}$or $D = .460 * (0.890625)^{(awg +3)}$.

American Wire Gauge (AWG): 在美国线规（AWG）系统中，可以通过应用公式 $(AWG)=.005 \cdot 92^{((36-AWG)/39)}$英寸来计算导线尺寸直径。对于 00、000、0000 等规格，您使用-1、-2、-3 等，这在数学上比"双零"更合理。这意味着在美国线规中，每减小 6 个规格，导线直径就加倍，每减小 3 个规格，导线横截面积就加倍。类似于信号和功率级别中的分贝。由 Mario Rodriguez 贡献的这个近似但足够准确的公式是 $D = .460 * (57/64)^{(awg +3)}$ 或 $D = .460 * (0.890625)^{(awg +3)}$.

Metric Wire Gauges (see table below)

Metric Gauge: In the Metric Gauge scale, the gauge is 10 times the diameter in millimeters, so a 50 gauge metric wire would be 5 mm in diameter. Note that in AWG the diameter goes up as the gauge goes down, but for metric gauges it is the opposite. Probably because of this confusion, most of the time metric sized wire is specified in millimeters rather than metric gauges.

公制规格：在公制规格刻度中，规格是导线直径的 10 倍，因此 50 规格的公制导线直径将为 5 毫米。请注意，在美国线规中，随着规格的减小，直径会增加，但是对于公制规格来说恰恰相反。可能因为这种混淆，大多数情况下，公制尺寸的导线是以毫米而不是米制规格来指定的。

Load Carrying Capacities (see table below)

Definition: ampacity is the current carrying capability of a wire. In other words, how many amps can it transmit? The following chart is a guideline of ampacity or copper wire current carrying capacity following the*Handbook of Electronic Tables and Formulas*for American Wire Gauge. As you might guess, the rated ampacities are just a rule of thumb. In careful engineering the voltage drop, insulation temperature limit, thickness, thermal conductivity, and air convection and temperature should all be considered. The Maximum Amps for Power Transmission uses the 700 circular mils per amp rule, which is very very conservative. The Maximum Amps for Chassis Wiring is also a conservative rating, but is meant for wiring in air, and not in a bundle. For short lengths of wire, such as is used in battery packs you should trade off the resistance and load with size, weight, and flexibility. NOTE: For installations that need to conform to the National Electrical Code, you must use their guidelines. Contact your local electrician to find out what is legal!

定义：安培容量是导线的电流承载能力。换句话说，它可以传输多少安培？以下图表是根据美国线规的《电子表格和公式手册》制定的铜导线电流承载能力的指导线。您可能会猜到，额定的安培容量只是一个经验法则。在仔细的工程中，应考虑电压降、绝缘温度限制、厚度、导热性和空气对流和温度。用于电力传输的最大安培采用了每安培 700 圆米的规则，这是非常保守的。用于车身布线的最大安培也是一个保守的评级，但是适用于空气中的布线，而不是在一束中。对于如电池组中所使用的短长度的导线，您应该在电阻、负载与尺寸、重量和柔韧性之间进行权衡。注意：对于需要符合国家电气法典的安装，您必须使用其指南。请咨询您当地的电工以了解合法性！

Maximum Frequency for 100% Skin Depth Chart

This data is useful for high frequency AC engineering. When high frequency AC is conducted by a wire there is a tendency for the current to flow along the outside of the wire. This increases the effective resistance. The frequency listed in the table shows the frequency at which the calculated skin depth is equal to the radius of the wire, and is an indication that above this frequency you should start considering the skin effect when calculating the wire's resistance.

100% Skin Depth Chart 的最大频率 这些数据对于高频交流工程非常有用。当高频交流通过导线传导时，电流会倾向于沿导线外部流动。这增加了有效电阻。表中列出的频率显示了计算的皮肤深度等于导线半径的频率，表明在此频率以上，您应该开始考虑计算导线电阻时的皮肤效应。

AWG gauge	Conductor Diameter Inches	Conductor Diameter mm	Conductor cross section in mm^2	Ohms per 1000 ft.	Ohms per km	Maximum amps for chassis wiring	Maximum amps for power transmission	Maximum frequency for 100% skin depth for solid conductor copper
0000	0.46	11.684	107	0.049	0.16072	380	302	125 Hz
000	0.4096	10.40384	84.9	0.0618	0.202704	328	239	160 Hz
00	0.3648	9.26592	67.4	0.0779	0.255512	283	190	200 Hz
0	0.3249	8.25246	53.5	0.0983	0.322424	245	150	250 Hz
1	0.2893	7.34822	42.4	0.1239	0.406392	211	119	325 Hz
2	0.2576	6.54304	33.6	0.1563	0.512664	181	94	410 Hz
3	0.2294	5.82676	26.7	0.197	0.64616	158	75	500 Hz
4	0.2043	5.18922	21.1	0.2485	0.81508	135	60	650 Hz
5	0.1819	4.62026	16.8	0.3133	1.027624	118	47	810 Hz
6	0.162	4.1148	13.3	0.3951	1.295928	101	37	1100 Hz
7	0.1443	3.66522	10.6	0.4982	1.634096	89	30	1300 Hz
8	0.1285	3.2639	8.37	0.6282	2.060496	73	24	1650 Hz
9	0.1144	2.90576	6.63	0.7921	2.598088	64	19	2050 Hz
10	0.1019	2.58826	5.26	0.9989	3.276392	55	15	2600 Hz
11	0.0907	2.30378	4.17	1.26	4.1328	47	12	3200 Hz
12	0.0808	2.05232	3.31	1.588	5.20864	41	9.3	4150 Hz
13	0.072	1.8288	2.63	2.003	6.56984	35	7.4	5300 Hz
14	0.0641	1.62814	2.08	2.525	8.282	32	5.9	6700 Hz
15	0.0571	1.45034	1.65	3.184	10.44352	28	4.7	8250 Hz
16	0.0508	1.29032	1.31	4.016	13.17248	22	3.7	11 k Hz
17	0.0453	1.15062	1.04	5.064	16.60992	19	2.9	13 k Hz
18	0.0403	1.02362	0.823	6.385	20.9428	16	2.3	17 kHz
19	0.0359	0.91186	0.653	8.051	26.40728	14	1.8	21 kHz
20	0.032	0.8128	0.519	10.15	33.292	11	1.5	27 kHz
21	0.0285	0.7239	0.412	12.8	41.984	9	1.2	33 kHz
22	0.0253	0.64516	0.327	16.14	52.9392	7	0.92	42 kHz
23	0.0226	0.57404	0.259	20.36	66.7808	4.7	0.729	53 kHz
24	0.0201	0.51054	0.205	25.67	84.1976	3.5	0.577	68 kHz
25	0.0179	0.45466	0.162	32.37	106.1736	2.7	0.457	85 kHz
26	0.0159	0.40386	0.128	40.81	133.8568	2.2	0.361	107 kHz
27	0.0142	0.36068	0.102	51.47	168.8216	1.7	0.288	130 kHz
28	0.0126	0.32004	0.080	64.9	212.872	1.4	0.226	170 kHz
29	0.0113	0.28702	0.0647	81.83	268.4024	1.2	0.182	210 kHz
30	0.01	0.254	0.0507	103.2	338.496	0.86	0.142	270 kHz
31	0.0089	0.22606	0.0401	130.1	426.728	0.7	0.113	340 kHz
32	0.008	0.2032	0.0324	164.1	538.248	0.53	0.091	430 kHz
Metric 2.0	0.00787	0.200	0.0314	169.39	555.61	0.51	0.088	440 kHz
33	0.0071	0.18034	0.0255	206.9	678.632	0.43	0.072	540 kHz
Metric 1.8	0.00709	0.180	0.0254	207.5	680.55	0.43	0.072	540 kHz

AWG gauge	Conductor Diameter Inches	Conductor Diameter mm	Conductor cross section in mm^2	Ohms per 1000 ft.	Ohms per km	Maximum amps for chassis wiring	Maximum amps for power transmission	Maximum frequency for 100% skin depth for solid conductor copper
34	0.0063	0.16002	0.0201	260.9	855.752	0.33	0.056	690 kHz
Metric 1.6	0.0063	0.16002	0.0201	260.9	855.752	0.33	0.056	690 kHz
35	0.0056	0.14224	0.0159	329	1079.12	0.27	0.044	870 kHz
Metric 1.4	.00551	.140	0.0154	339	1114	0.26	0.043	900 kHz
36	0.005	0.127	0.0127	414.8	1360	0.21	0.035	1100 kHz
Metric 1.25	.00492	0.125	0.0123	428.2	1404	0.20	0.034	1150 kHz
37	0.0045	0.1143	0.0103	523.1	1715	0.17	0.0289	1350 kHz
Metric 1.12	.00441	0.112	0.00985	533.8	1750	0.163	0.0277	1400 kHz
38	0.004	0.1016	0.00811	659.6	2163	0.13	0.0228	1750 kHz
Metric 1	.00394	0.1000	0.00785	670.2	2198	0.126	0.0225	1750 kHz
39	0.0035	0.0889	0.00621	831.8	2728	0.11	0.0175	2250 kHz
40	0.0031	0.07874	0.00487	1049	3440	0.09	0.0137	2900 kHz