

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°C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°C.

特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	單位 UNIT
初始磁導率 μ_i Initial Permeability	100KHz & <0.2mT		2500 ± 25%	
增幅磁導率 μ_a Amplitude Permeability	25KHz/400mT	25°C	> 4000	
	25KHz/320mT	100°C	> 3500	
飽和磁通密度 B_s Saturation Flux Density	1200 A/m 100Hz	25°C	500	mT
		100°C	400	
殘留磁通密度 B_r Remanence	1200 A/m 100Hz	25°C	130	mT
		100°C	70	
矯頑力 H_c Coercivity	1200 A/m 100Hz	25°C	10	A/m
		100°C	7	
相對損失因子 Loss Factor	100KHz & <0.2mT		<10	10^{-6}
居禮溫度 T_c Curie Temp.	100KHz & <0.2mT		>210	°C
密度 D Density	阿基米德法 Archimedes method		4.8	g/cm ³
表面電阻 ρ Electrical Resistivity	直流電流 DC Current		>6	$\Omega \cdot m$
功率損耗 P_{cv} Power Loss	100KHz/200mT	25°C	600	kW/m ³
		100°C	400	
	300KHz/100mT	25°C	620	
		100°C	420	
	500KHz/50mT	25°C	270	
		100°C	200	

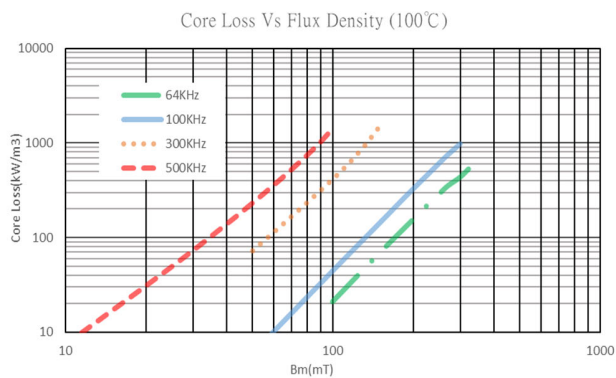
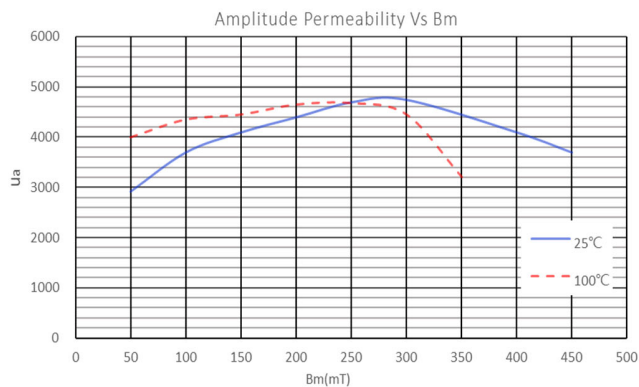
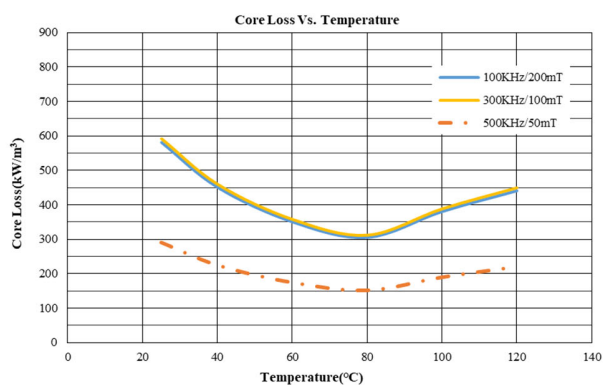
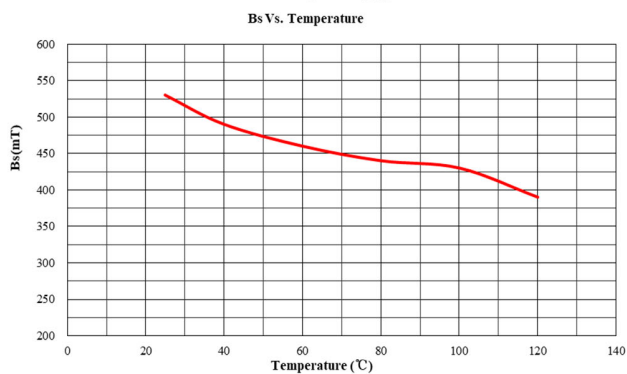
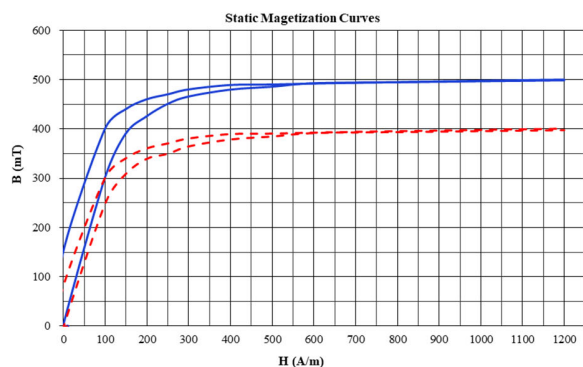
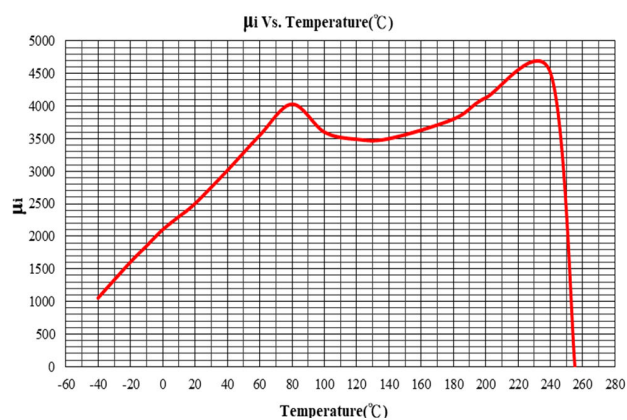
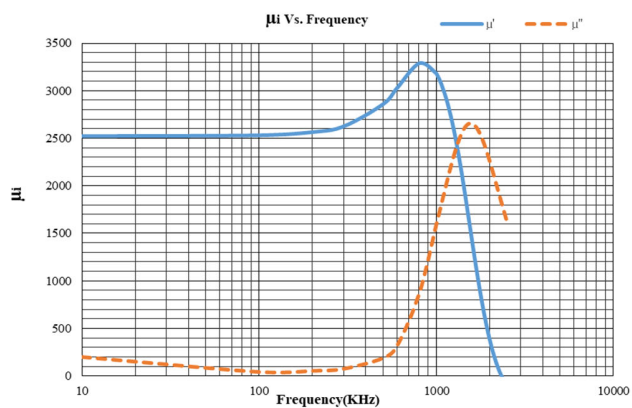
备注：各項數值均為環形磁芯 T25*15*8 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差異。

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.

目錄內容變更時不會另行通知，请务必索取能进一步确认详细特性、规格的规格书。

Data is subject to change without prior notice, please be sure to request a specification for further confirmation of detailed features and specifications.

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Steinmetz Model

$$P_{cv} = K * f^a * B_m^b$$

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/m³ / Freq:KHz / Bm:mT