

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	單位 UNIT
初始磁導率 μ_i Initial Permeability	100KHz & <0.2mT		700±25%	
增幅磁導率 μ_a Amplitude Permeability	25KHz/400mT	25°C	> 1400	
	25KHz/320mT	100°C	> 1200	
飽和磁通密度 B_s Saturation Flux Density	1200 A/m 50Hz	25°C	540	mT
		100°C	450	
殘留磁通密度 B_r Remanence	1200 A/m 50Hz	25°C	100	mT
		100°C	90	
矯頑力 H_c Coercivity	1200 A/m 50Hz	25°C	20	A/m
		100°C	15	
相對損失因子 Loss Factor	1MHz		<6	10^{-6}
	5MHz		<30	
居禮溫度 T_c Curie Temp.	100KHz & <0.2mT		>290	°C
密度 D Density	阿基米德法 Archimedes method		>4.85	g/cm ³
表面電阻 ρ Electrical Resistivity	直流電流 DC Current		10	$\Omega\cdot m$
功率損耗 P_{cv} Power Loss	500KHz/100mT	25°C	400	kW/m ³
		100°C	600	
	1MHz/50mT	25°C	70	
		100°C	80	
	2MHz/50mT	25°C	200	
		100°C	250	
	3MHz/30mT	25°C	140	
		100°C	180	

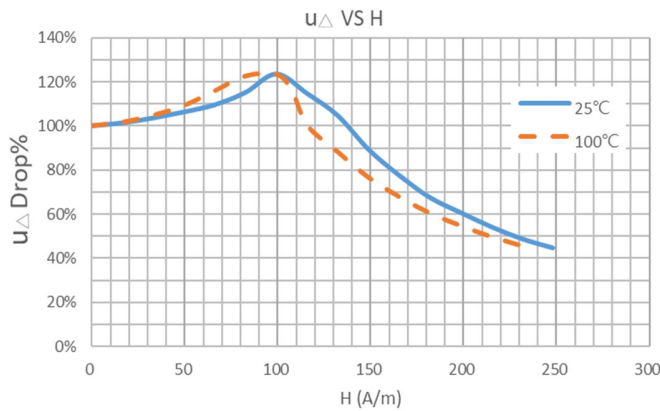
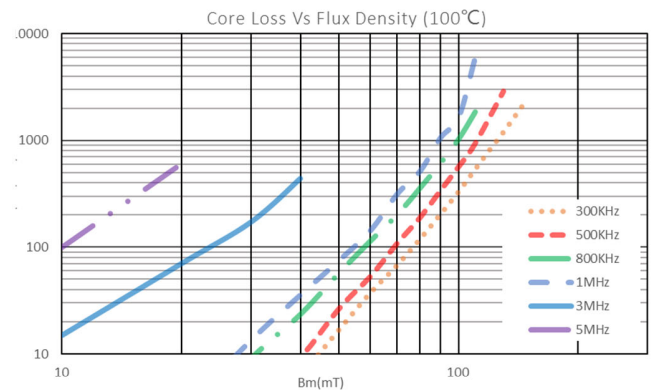
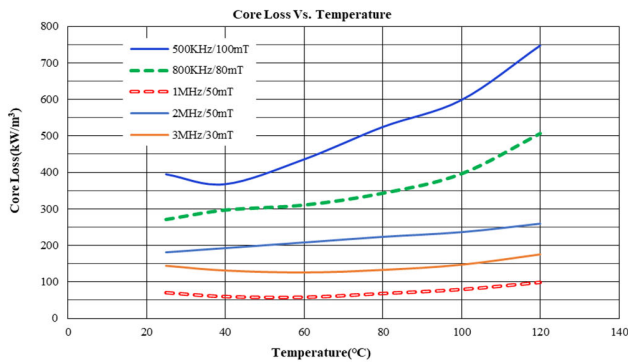
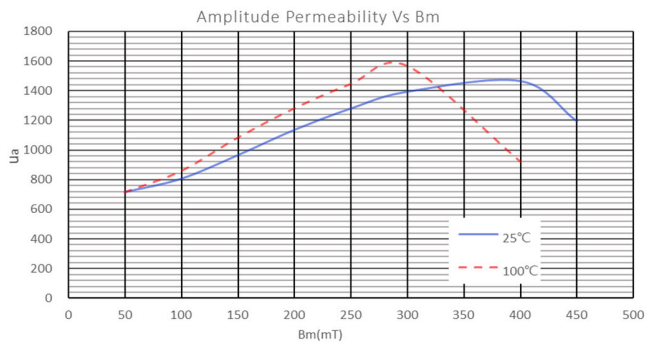
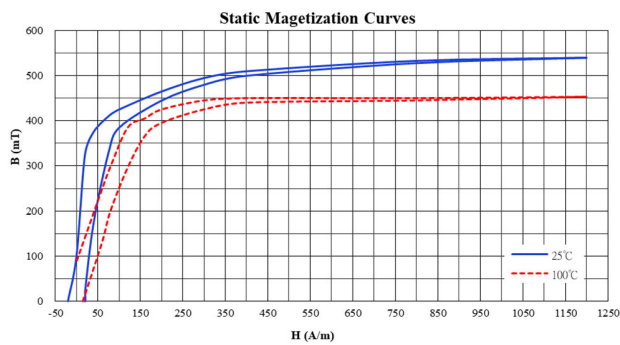
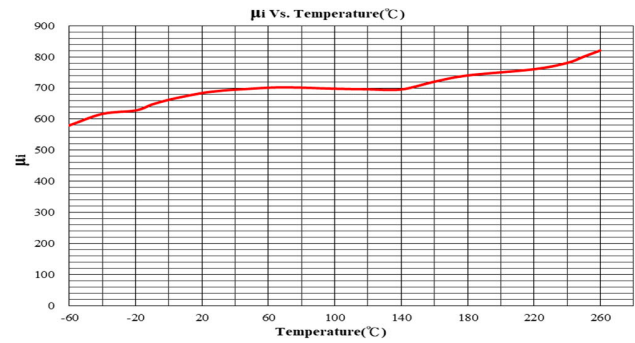
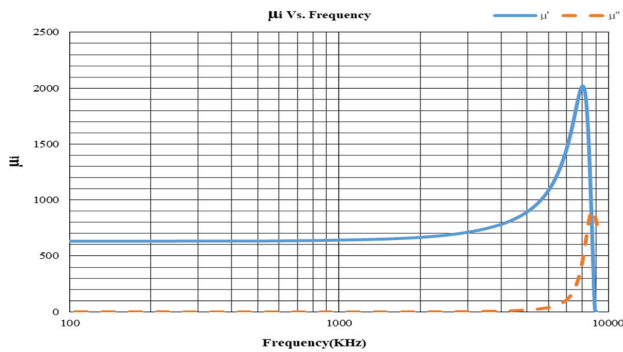
备注: 各項數值均為環形磁芯 T12. 5*7. 5*7 測得的典型數值。由于幾何形狀和尺寸的影響，產品規格將與這些數據有所差異。

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.

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.

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



Steinmetz Model

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

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/m³ / Freq:KHz / Bm:mT