MF1 鎂鋅材料 MG-ZN MATERIAL

MF1 為鎂鋅鐵氧體材料，初始導磁率（μi）約 180，飽和磁通密度（Bs）約 350 mT，居禮溫度高於 210 ℃。其特徵為低導磁率、低損耗與高溫穩定性，適合 **RF/IF 濾波器、諧振電感，以及高頻訊號線 EMI 抑制**，能兼顧低失真與可靠性。

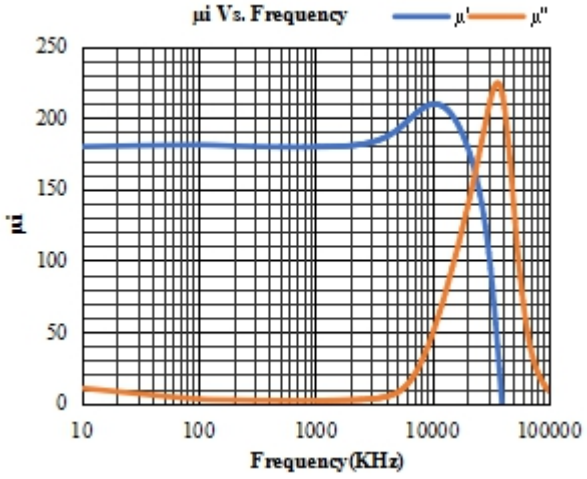
MF1 is a Mg－Zn ferrite material with an initial permeability (μi) of about 180, a saturation flux density (Bs) of 350 mT, and a Curie temperature above 210 ℃. With low permeability, low loss, and high thermal stability, it is suitable for **RF/IF filters, resonant inductors, and high-frequency EMI suppression on signal lines**, ensuring both low distortion and reliability.

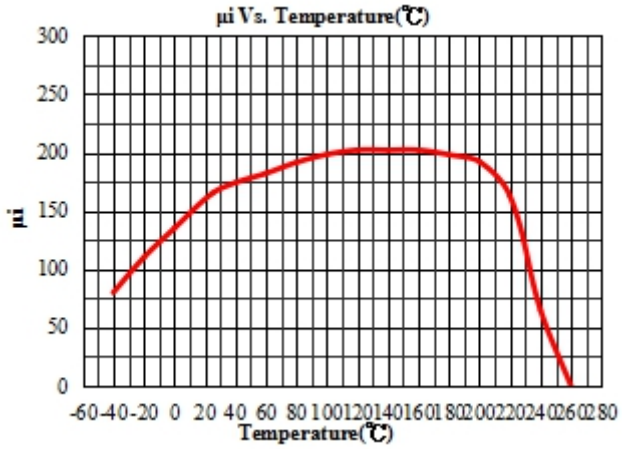
特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	單位 UNIT
初始磁導率 u_i Initial Permeability	100KHz & <0.2mT		180±25%	
飽和磁通密度 Bs Saturation Flux Density	3000 A/m 100Hz	25℃	350	mT
		100℃	185	
殘留磁通密度 Br Remanence	3000 A/m 100Hz	25℃	240	mT
		100℃	85	
矯頑力 Hc Coercivity	3000 A/m 100Hz	25℃	25	A/m
		100℃	15	
$\alpha\ \mu\ \gamma$ (溫度系數)	20-60℃		35	$x10^{-6}$
相對損失因數 Loss Factor	0.1MHz & <0.2mT		55	$x10^{-6}$
	0.5MHz & <0.2mT		70	
居禮溫度 Tc Curie Temp.	100KHz & <0.2mT		>210	℃
密度 D Density	阿基米德法 Archimedes method		4.9	g/cm^3
表面電阻 ρ Electrical Resistivity	直流電流 DC Current		10^7	Ω-m

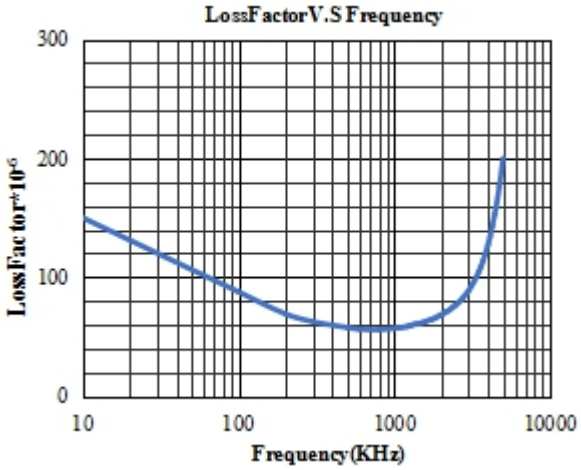
備註：各項數值均為環形磁芯 T31*19*8 測得的典型數值，由於幾何形狀和尺寸的影響，產品規格將與這些數據有所差異。

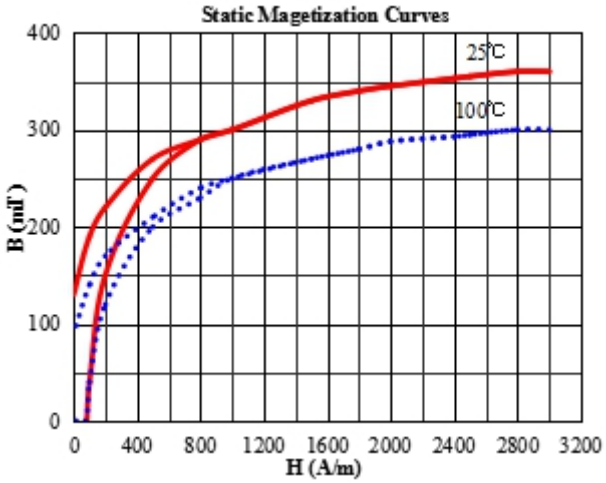
Note：All values are typical values measured for the toroidal magnetic core T31*19*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

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


μi Vs. Frequency
μ'
μ''
μi
250
200
150
100
50
0
10
100
1000
10000
100000
Frequency(KHz)


μi Vs. Temperature(℃)
μi
300
250
200
150
100
50
0
-60 -40 -20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280
Temperature(℃)


LossFactorV.S Frequency
LossFactor*10⁻⁶
300
200
100
0
10
100
1000
10000
Frequency(KHz)


Static Magetization Curves
25℃
100℃
B (mT)
400
300
200
100
0
0
400
800
1200
1600
2000
2400
2800
3200
H (A/m)