

高導磁率高磁通 EMI 材料 HIGH PEAM. & HIGH FLUX &EMI MATERIALS

G5A 高導磁高磁通 EMI 材料 HIGH PEAM. & HIGH FLUX &EMI MATERIALS

G5A 為鎳鋅鐵氧體材料，初始導磁率 (μ_i) 約 800，飽和磁通密度 (B_s) 約 380 mT，居裡溫度高於 180 °C。此材料兼具中高導磁率與良好的頻率響應，屬於通用型材料，可同時應用於功率電感與 EMI 共模/差模濾波器。它在功率電感應用中適中低頻段 (0.1 – 1 MHz) 的電源模組與直流轉換器，能承受一定的電流負載；同時在 EMI 濾波領域能提供良好的阻抗效果，尤其是在差模狀態下可發揮其較高的 B_s 優勢。

G5A is a NiZn ferrite material with an initial permeability (μ_i) of about 800, a saturation flux density (B_s) of approximately 380 mT, and a Curie temperature above 180 °C. This material combines medium-high permeability with good frequency response and is classified as a versatile general-purpose material suitable for both power inductors and EMI common-mode/differential-mode filters. In power inductor applications, it is well-suited for the mid-to-low frequency range (0.1 – 1 MHz) such as power modules and DC-DC converters, where it can handle moderate current loads. In EMI filter applications, it provides strong impedance performance, with its higher B_s offering particular advantages in differential-mode operation.

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		800±25%	
飽和磁通密度 B_s Saturation Flux Density	3000 A/m 100Hz	25°C	400	mT
		100°C	310	
殘留磁通密度 B_r Remanence	3000 A/m 100Hz	25°C	250	mT
		100°C	220	
矯頑力 H_c Coercivity	3000 A/m 100Hz	25°C	25	A/m
		100°C	15	
$\alpha \mu \gamma$ (溫度系數)	20-60°C		10	$\times 10^{-6}$
相對損失因數 Loss Factor	0.1MHz & <0.2mT		10	$\times 10^{-6}$
	1.0MHz & <0.2mT		30	
居禮溫度 T_c Curie Temp.	100KHz & <0.2mT		>190	°C
密度 D Density	阿基米德法 Archimedes method		5.1	g/cm^3
表面電阻 ρ Electrical Resistivity	直流電流 DC Current		10^7	$\Omega\cdot m$

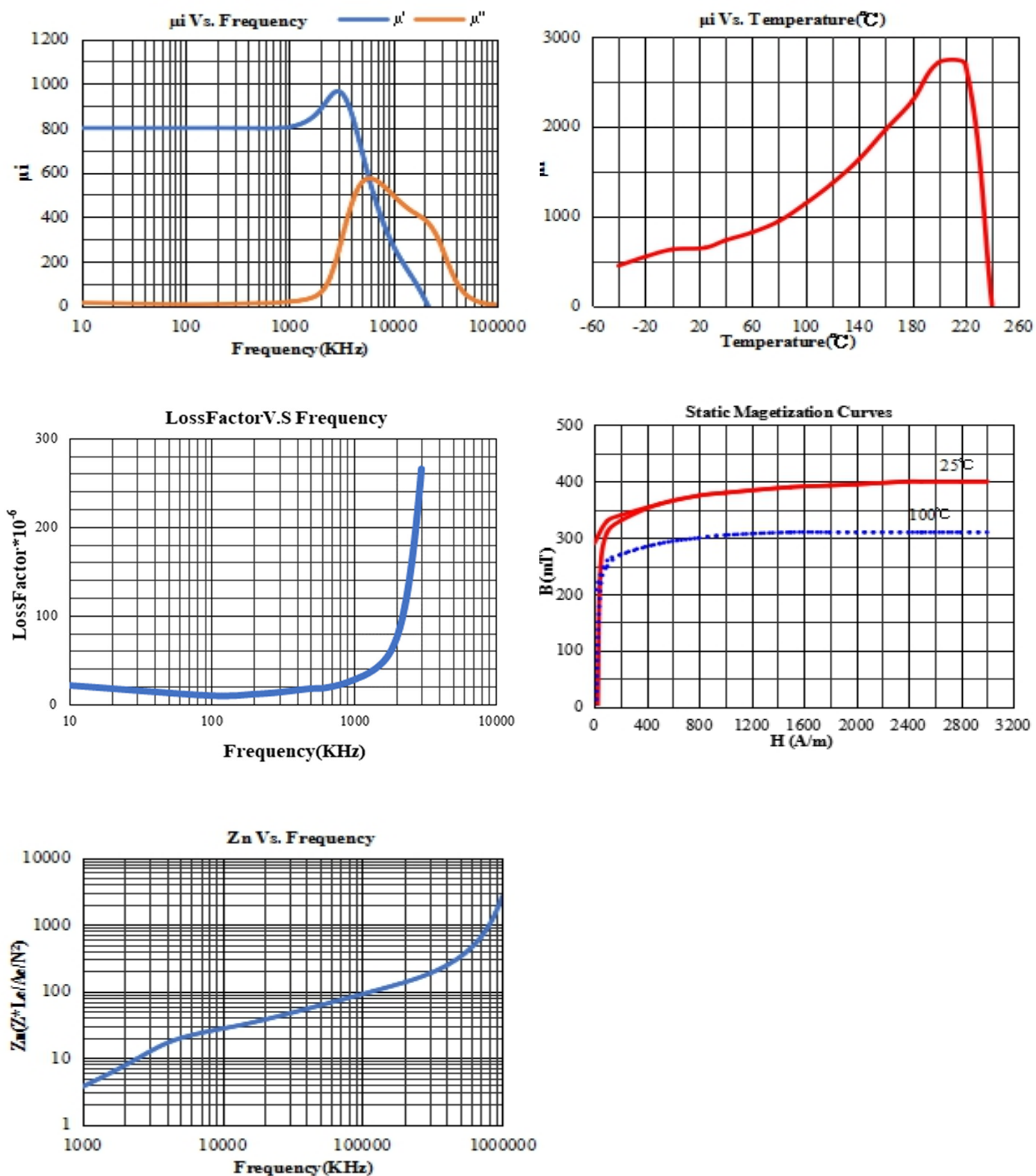
備註：各項數值均為環形磁芯 T31*19*13 測得的典型數值。由於幾何形狀和尺寸的影響，產品規格將與這些數據有所差異。

Note : All values are typical values measured for the toroidal magnetic core T31*19*13. 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.

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