

## 寬溫穩定材料 WIDE TEMP STABLE MATERIALS

### SL50 寬溫穩定材料 WIDE TEMP STABLE MATERIAL

為鎳鋅鐵氧體材料，初始導磁率 ( $\mu_i$ ) 約 500，飽和磁通密度 ( $B_s$ ) 約 350 mT，居里溫度高於 200 °C。此材料設計重點為低溫度係數與電感值穩定性，適合用於功率電感、DC - DC 轉換器及高頻電源模組。尤其適合需要在寬溫範圍內保持電感穩定的應用。

SL50 is a NiZn ferrite material with an initial permeability ( $\mu_i$ ) of about 500, a saturation flux density ( $B_s$ ) of 350 mT, and a Curie temperature above 200 °C. Designed with a focus on low temperature coefficient and inductance stability, it is suitable for power inductors, DC - DC converters, and high-frequency power modules. It is particularly well-suited for applications requiring stable inductance over a wide temperature range.

特性 CHARACTERISTICS	測試條件 CONDITION		典型值 TYPICAL VALUE	單位 UNIT
初始磁導率 $\mu_i$ Initial Permeability	100KHz & <0.2mT		500 ± 25%	
飽和磁通密度 $B_s$ Saturation Flux Density	3000 A/m	25°C	350	mT
	100Hz	100°C	230	
殘留磁通密度 $B_r$ Remanence	3000 A/m	25°C	180	mT
	100Hz	100°C	110	
矯頑力 $H_c$ Coercivity	3000 A/m	25°C	100	A/m
	100Hz	100°C	80	
$\alpha \mu \gamma$	-40-140°C		0~2	$\times 10^{-6}$
相對損失因子 Loss Factor	0.1 MHz & <0.2mT		18	$\times 10^{-6}$
	1.0 MHz & <0.2mT		35	
居禮溫度 $T_c$ Curie Temp.	100KHz & <0.2mT		>180	°C
密度 $D$ Density	阿基米德法 Archimedes method		5.0	g/cm <sup>3</sup>
表面電阻 $\rho$ Electrical Resistivity	直流電流 DC Current		$10^7$	$\Omega\text{-m}$

备注：各項數值均為環形磁芯 T22\*14\*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。

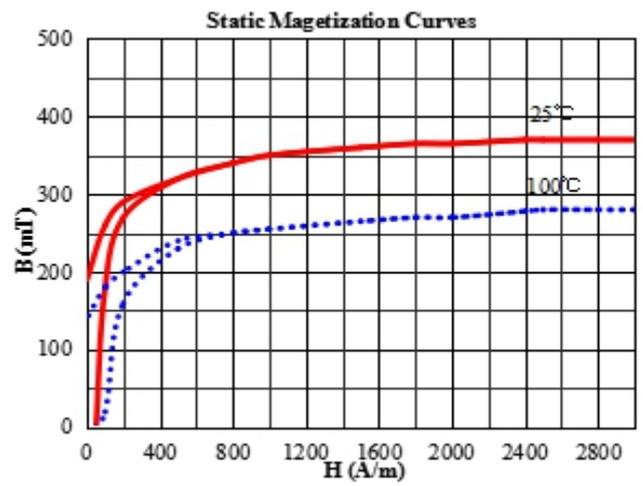
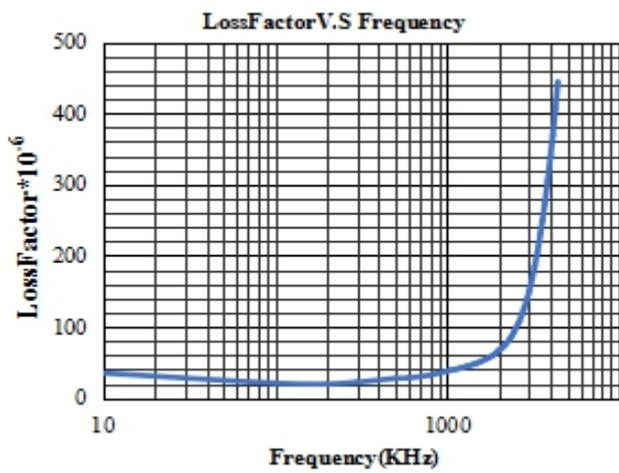
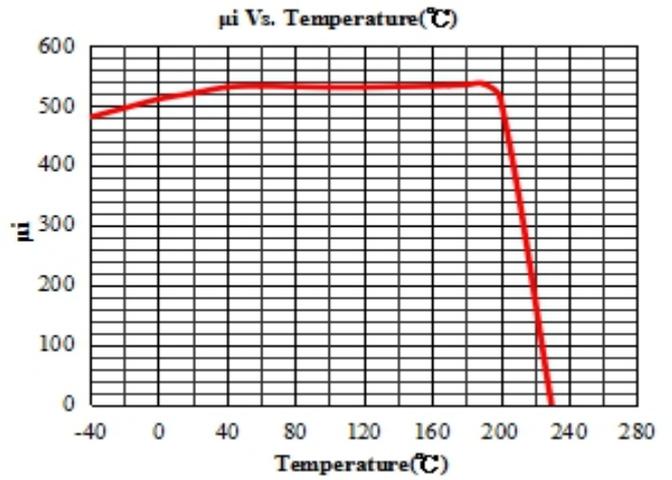
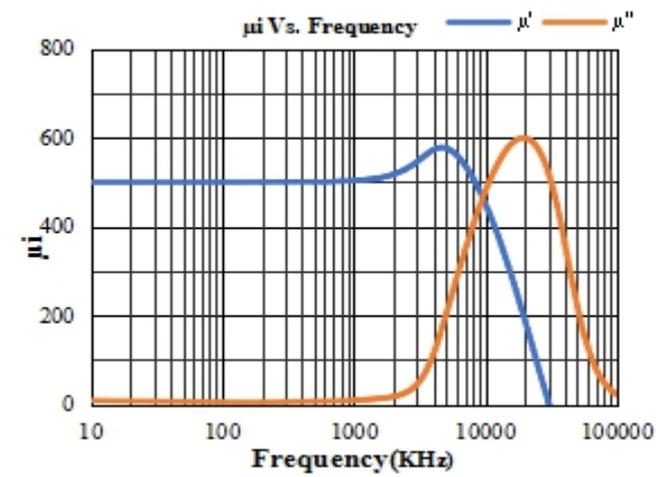
Note : All values are typical values measured for the toroidal magnetic core T22\*14\*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

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.

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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.