## M61H 高頻穩定材料 (HIGH FREQUENCY STABLE MATERIAL)

M61H 為鎳鋅鐵氧體材料，初始導磁率（μi）約 100，飽和磁通密度（Bs）約 420 mT，居禮溫度高於 280 ℃。相較 M61，具更高飽和磁通與功率承載力，適合**大電流高頻電感、無線充電線圈，以及需要耐高溫的射頻功率濾波器**。

M61H is a NiZn ferrite material with an initial permeability (μi) of about 100, a saturation flux density (Bs) of 420 mT, and a Curie temperature above 280 ℃. Compared to M61, it provides higher saturation flux density and power-handling capability, making it suitable for **high-current high-frequency inductors, wireless charging coils, and RF power filters requiring high-temperature tolerance**.

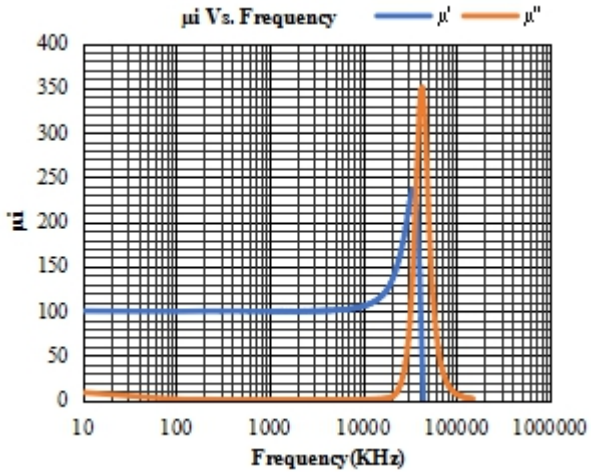
| 特性<br>CHARACTERISTICS | 測試條件<br>CONDITION | | 典型值<br>TYPICAL VALUE | 單位<br>UNIT |
|---|---|---|---|---|
| 初始磁導率 $u_i$<br>Initial Permeability | 100KHz & <0.2mT | | 100±25% | |
| Applicable frequency<br>(適用頻率) | | | <15 | MHz |
| 飽和磁通密度 Bs<br>Saturation Flux Density | 3000 A/m<br>100Hz | 25℃ | 420 | mT |
| | | 100℃ | 370 | |
| 殘留磁通密度 Br<br>Remanence | 3000 A/m<br>100Hz | 25℃ | 255 | mT |
| | | 100℃ | 195 | |
| 矯頑力 Hc<br>Coercivity | 3000 A/m<br>100Hz | 25℃ | 105 | A/m |
| | | 100℃ | 95 | |
| $\alpha\ \mu\ \gamma$<br>(溫度系數) | 20-60℃ | | 15 | $x10^{-6}$ |
| 相對損失因數<br>Loss Factor | 1.0MHz& <0.2mT | | 50 | $x10^{-6}$ |
| | 5.0MHz& <0.2mT | | 50 | |
| 居禮溫度 Tc<br>Curie Temp. | 100KHz & <0.2mT | | >280 | ℃ |
| 密度 D<br>Density | 阿基米德法<br>Archimedes method | | 5.0 | $g/cm^3$ |
| 表面電阻 ρ<br>Electrical Resistivity | 直流電流<br>DC Current | | $10^7$ | Ω-m |

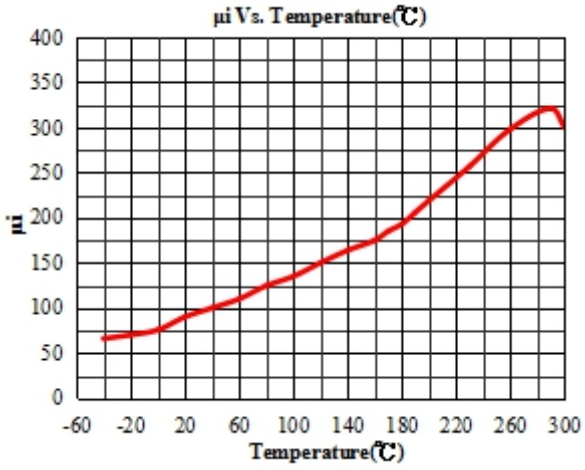
備註：各項數值均為環形磁芯 T31*19*8 測得的典型數值，由於幾何形狀和尺寸的影響，產品規格將與這些數據有所差異。

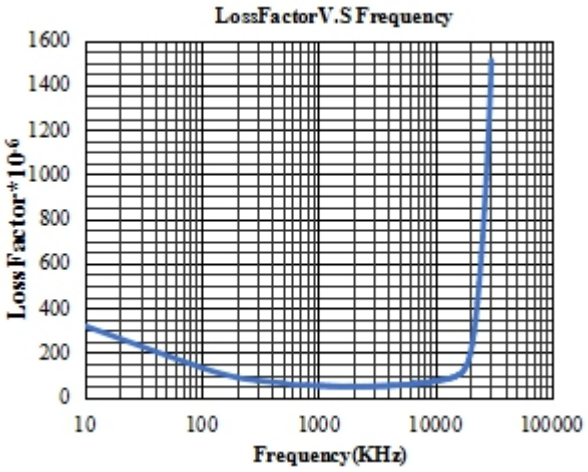
Note：All values are typical values measured for the toroidal magnetic core T31*19*8. Due to the influence of geometric shape and size, the product specifications may differ from these data.

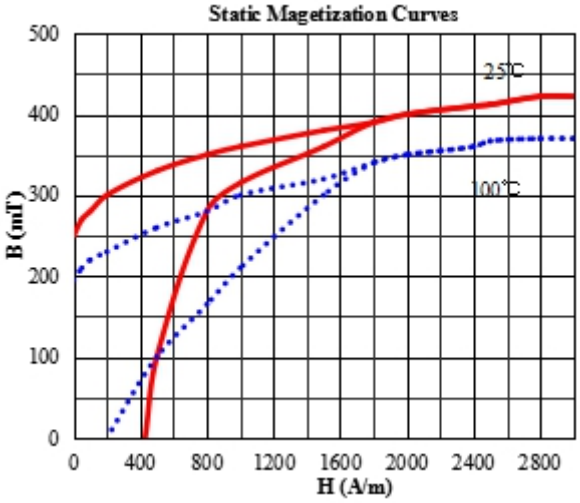


如需更多資訊或有任何需求，請隨時與我們的業務人員聯繫。我們將竭誠為您服務。
For more information or any inquiries, please feel free to contact our sales representatives. We are dedicated to serving you.
TEL：86-762-4329901 EX.605　E-mail：sales6@takferrite.com


μi Vs. Frequency
μ'
μ''
μi
400
350
300
250
200
150
100
50
0
10
100
1000
10000
100000
1000000
Frequency(KHz)


μi Vs. Temperature(℃)
μi
400
350
300
250
200
150
100
50
0
-60
-20
20
60
100
140
180
220
260
300
Temperature(℃)


LossFactorV.S Frequency
Loss Factor*10-6
1600
1400
1200
1000
800
600
400
200
0
10
100
1000
10000
100000
Frequency(KHz)


Static Magetization Curves
B (mT)
500
400
300
200
100
0
25℃
100℃
0
400
800
1200
1600
2000
2400
2800
H (A/m)