

T2M 为低频高饱和锰锌功率铁氧体，初始磁导率 (μ_i) 2000，饱和磁通密度 (B_s) 510 mT (25 °C) / 410 mT (100 °C)，居里温度高于 220 °C。相较 T2，它把 100 °C 的 B_s 提高 20 mT、居里温度提高 40 °C，矫顽力 (H_c) 在 25 °C 与 100 °C 都维持 10 A/m，磁滞特性不随温度漂移；损耗略高于 T2 (25 kHz / 200 mT : 270 → 330 kW/m³ ; 100 kHz / 100 mT : 360 → 520 kW/m³)，仍属低频功率材料的常见水准。典型应用为 100 kHz 以下、磁芯温度偏高的电子镇流器、低频电源变压器与储能扼流圈。在低频高 B_s 群中，T2M 是耐温取向的一支：以损耗优先、磁芯温度不高时选 T2；需要更高的 100 °C B_s (TB2 460 mT、TM82 500 mT) 与直流偏磁承受力时往 TB2 / TM82 走。选用时以热态的饱和裕度而非常温 μ_i 判断——它的 μ_i 低于 T2，优势在 B_s 与 T_c 。

T2M is a low-frequency high-flux MnZn power ferrite with an initial permeability (μ_i) of 2000, a saturation flux density (B_s) of 510 mT at 25 °C (410 mT at 100 °C) and a Curie temperature above 220 °C. Against T2 it adds 20 mT of B_s at 100 °C and 40 °C of Curie margin, and its coercivity (H_c) stays at 10 A/m at both 25 °C and 100 °C, so hysteresis behaviour does not drift with temperature; loss is somewhat higher than T2 (25 kHz / 200 mT: 270 → 330 kW/m³; 100 kHz / 100 mT: 360 → 520 kW/m³) but still normal for low-frequency power grades. Typical uses are electronic ballasts, low-frequency power transformers and storage chokes below 100 kHz whose cores run warm. Within the low-frequency high- B_s group T2M is the temperature-oriented grade: choose T2 when loss comes first and the core stays cool, TB2/TM82 for higher 100 °C B_s (460/500 mT) and DC-bias tolerance. Select it on hot-state saturation margin, not room-temperature μ_i — its μ_i is below T2's; its strengths are B_s and T_c .

- Electronic Ballast
- Low-Frequency Power Transformer
- Energy-Storage Choke

电磁特性 MAGNETIC CHARACTERISTICS

特性 Characteristic	条件 Condition	25 °C	100 °C	单位 Unit
初始磁导率 Initial Permeability μ_i	100 kHz & <0.2 mT	2000±25%		
增幅磁导率 Amplitude Permeability μ_a	25 kHz/400 mT	> 500	> 500	
饱和磁通密度 Saturation Flux Density B_s	1200 A/m 100 Hz	510	410	mT
残留磁通密度 Remanence B_r	1200 A/m 100 Hz	130	130	mT
矫顽力 Coercivity H_c	1200 A/m 100 Hz	10	10	A/m
相对损耗因子 Loss Factor	100 kHz & <0.2 mT	< 25		10 ⁻⁶
居里温度 Curie Temperature T_c	100 kHz & <0.2 mT	> 220		°C
密度 Density D	阿基米德法 Archimedes method	4.90		g/cm ³
电阻率 Electrical Resistivity ρ	直流电流 DC Current	>6		Ω·m

功率损耗 P_{cv} POWER LOSS · KW/M³

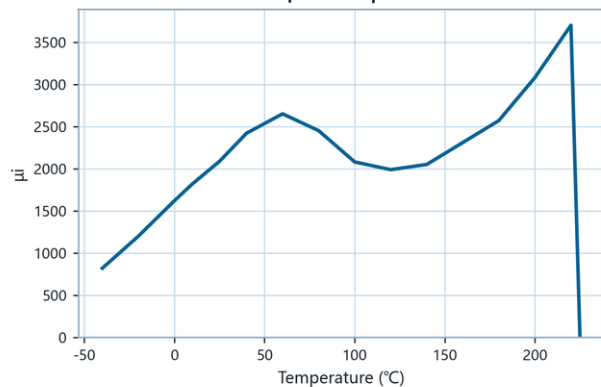
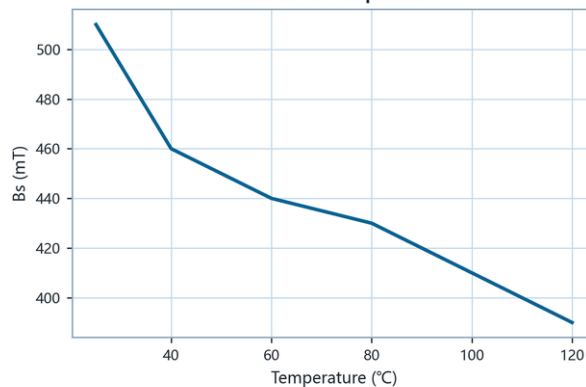
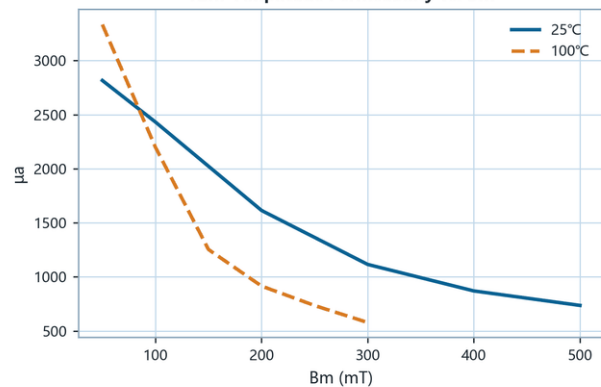
测试条件 Condition	25 °C	100 °C
25 kHz/200 mT	270	330
100 kHz/100 mT	360	520

特性曲线详见次页 CHARACTERISTIC CURVES — SEE NEXT PAGE

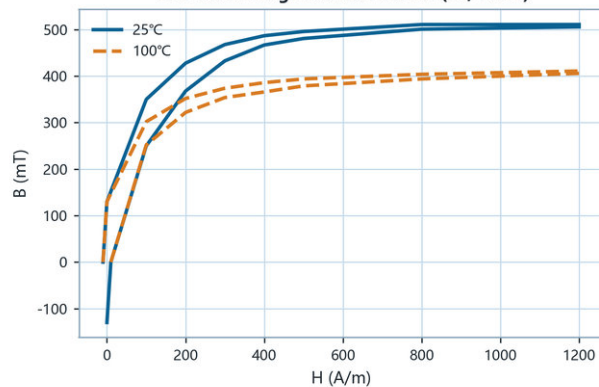
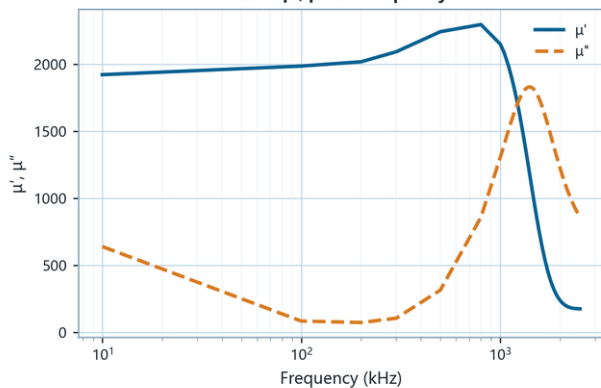
T2M

特性曲线

CHARACTERISTIC CURVES

T2M μ_i vs. TemperatureT2M B_s vs. TemperatureT2M Amplitude Permeability vs. B_m 

T2M Static Magnetization Curves (25/100°C)

T2M μ' , μ'' vs. Frequency

T2M Core Loss vs. Temperature

