

MATERIAL CHARACTERISTICS

D1B



TERM	SYMBOL	CONDITIONS	VALUE	UNIT
Initial Permeability	μ_i	10kHz 25 °C	350 ± 25%	
Maximum Magnetic Flux Density	Bm	10 Oe 25 °C	3550	Gauss
Residual Magnetic Flux Density	Br	25 °C	2500	Gauss
Coercive Force	Hc		0.40	Oe
Relative Loss Factor	$\tan \delta / \mu_i$	25 °C	250 MHz	10 ⁻⁶
Electrical Resistivity	ρ	DC 25 °C	≥10 ⁸	Ωcm
Temperature Coefficient	$\alpha_{\mu r}$	20 °C - 80 °C	≤ 6.25	10 ⁻⁶ K ⁻¹
Curie Temperature	Tc		>170	°C
Density	ρ		5000	kg/m ³

CHARACTERISTICS :

- High Bs
- Temperature stability of inductance

APPLICATIONS :

- Power inductor applications
- EMI Suppression
- dc- Superimposition application

Test Core Size :

T 20 x 12 x 10

Winding Method :

Ø0.3~2μEW~10 Ts for Permeability, RLF, Q
Ø0.3~2μEW~5 Ts for Impedance

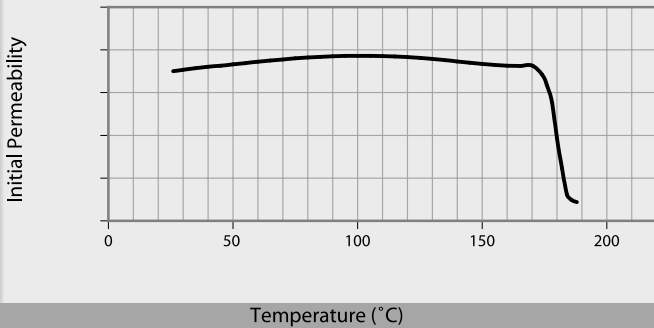
Test Frequency :

10kHz

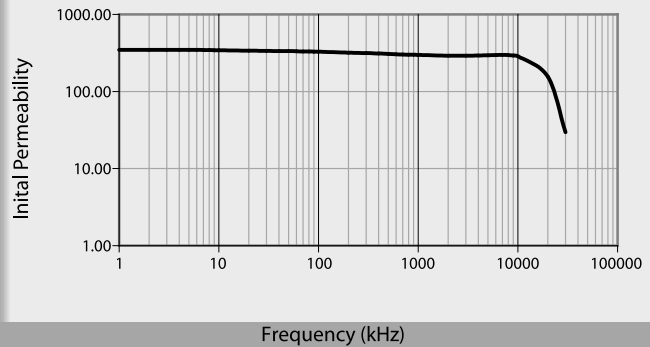
Test Equipment :

HP-4194A / HP-4284A / HP4286A / HP-4287A

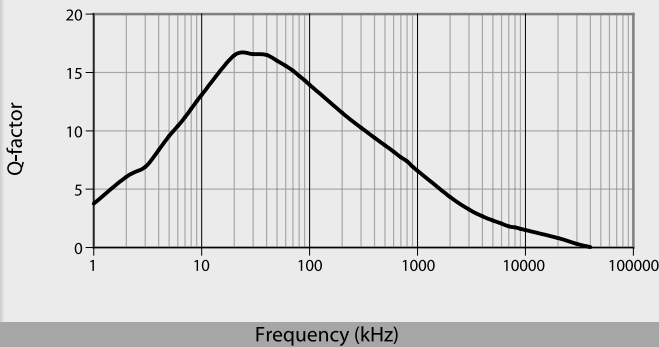
Initial Permeability vs. Temperature



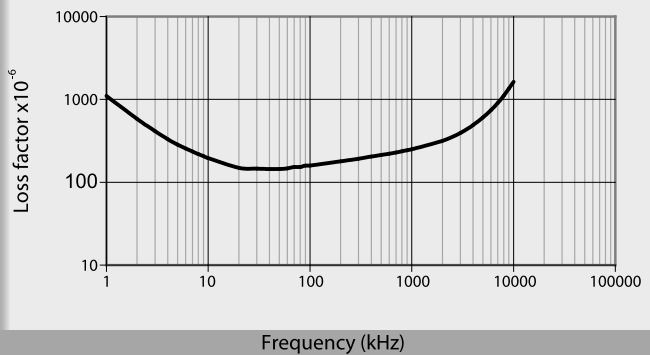
Initial Permeability vs. Frequency



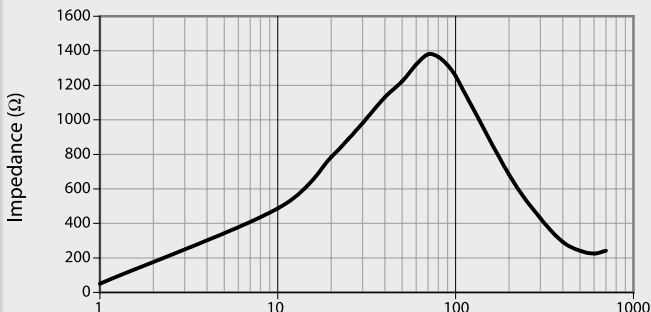
Q factor vs. Frequency



Loss factor vs. Frequency



Impedance vs. Frequency



B-H Curve

