

MATERIAL CHARACTERISTICS

D28



TERM	SYMBOL	CONDITIONS	VALUE	UNIT
Initial Permeability	μ_i	10kHz 25 °C	800 ± 25%	
Maximum Magnetic Flux Density	Bm	10 Oe 25 °C	2900	Gauss
Residual Magnetic Flux Density	Br	25 °C	1700	Gauss
Coercive Force	Hc		0.65	Oe
Relative Loss Factor	$\tan \delta / \mu_i$	25 °C 0.1 MHz	20	10^{-6}
Electrical Resistivity	ρ	DC 25 °C	$\geq 10^8$	Ωcm
Temperature Coefficient	$\alpha_{\mu r}$	20 °C - 80 °C	≤ 5	10^{-6}K^{-1}
		-50 °C - 80 °C	< 1.5	10^{-5}K^{-1}
Curie Temperature	Tc		> 150	°C
Density	ρ		5000	kg/m^3

CHARACTERISTICS :

- High permeability
- High impedance
- Good mechanical strength

APPLICATIONS :

- RFID antenna applications
- EMI Suppression

Test Core Size :

T 20 x 12 x 10

Winding Method :

$\varnothing 0.3 \sim 2\mu\text{EW} \sim 10 \text{ Ts}$ for Permeability, RLF, Q
 $\varnothing 0.3 \sim 2\mu\text{EW} \sim 5 \text{ Ts}$ for Impedance

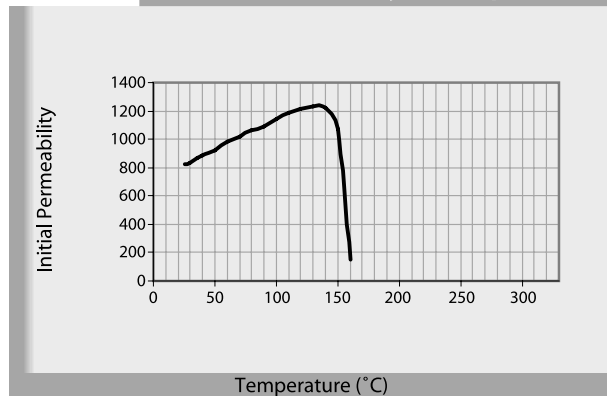
Test Frequency :

10kHz

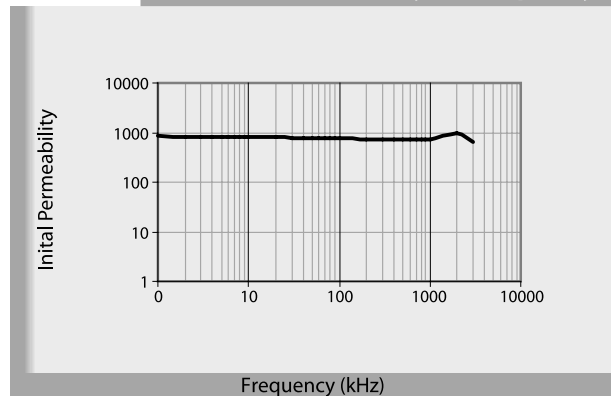
Test Equipment :

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

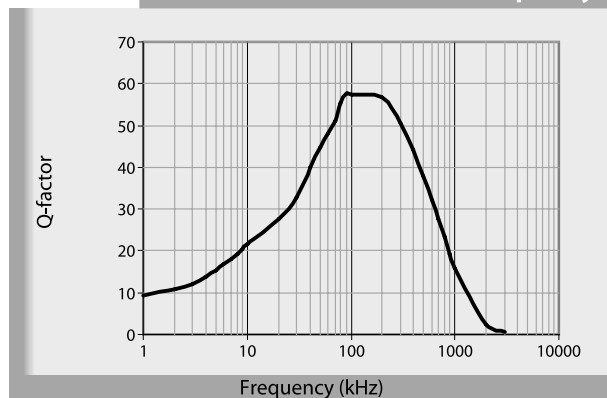
Initial Permeability vs. Temperature



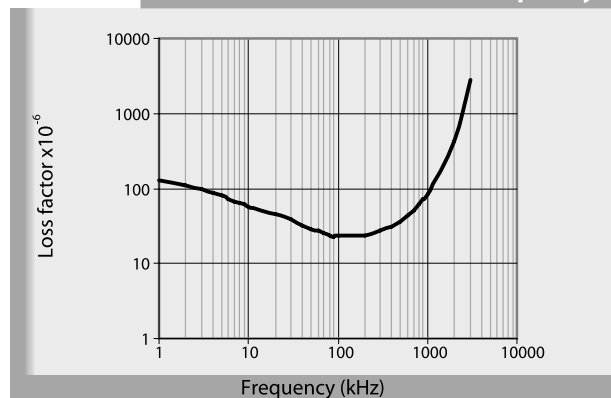
Initial Permeability vs. Frequency



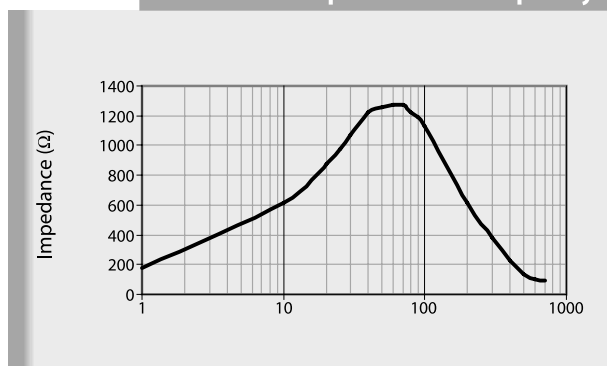
Q factor vs. Frequency



Loss factor vs. Frequency



Impedance vs. Frequency



B-H Curve

