

	Symbol	Unit	Measuring Conditions			Conventional Low Loss Material P42
			Freq.	Flux den.	Temp.	
Initial Permeability	μ_i		$\leq 10\text{kHz}$	0.25mT	25°C	1800 $\pm$ 25%
Amplitude Permeability	μ_a		25kHz	200mT	25°C	> 5000
					100°C	> 5000
Power Loss	Pv	KW/m ³	25kHz	200mT	25°C	125
					100°C	50
			100kHz	200mT	25°C	750
					100°C	350
			300kHz	100mT	25°C	900
					100°C	500
			500kHz	50mT	25°C	450
					100°C	300
Saturation Flux Density	Bs	mT	10kHz	H = 1200A/m	25°C	520
					100°C	420
Remanence	Br	mT	10kHz	H = 1200A/m	25°C	230
					100°C	60
Coercivity	Hc	A/m	10kHz	H = 1200A/m	25°C	13
					100°C	8
Hysteresis Material Constant	η_B	10 ⁻⁶ /mT	10kHz	1.5-3.0mT	25°C	< 1
Disaccommodation Factor	Df	10 ⁻⁶	10kHz	< 0.25 mT	25°C	< 2
Curie Temperature	Tc	°C				≥ 240
Resistivity	ρ	Ωm				8.00
Density	d	g/cm ³				4.90

Note: Material characteristics are typical for a toroid core.

Product specification will differ from these data due to the influence of geometry and size.

