

	Symbol	Unit	Measuring Conditions			Low η_B Material
			Freq.	Flux den.	Temp.	N42
Initial Permeability	μ_i		$\leq 10\text{kHz}$	0.25mT	25°C	$3800 \pm 25\%$
Relative Loss Factor	$\tan\delta/\mu_i$	10^{-6}	10kHz	$< 0.25\text{mT}$	25°C	< 3.5
			100kHz		25°C	< 3.5
Saturation Flux Density	B_s	mT	10kHz	$H = 1200\text{A/m}$	25°C	530
					100°C	425
Remanence	B_r	mT	10kHz	$H = 1200\text{A/m}$	25°C	100
					100°C	125
Coercivity	H_c	A/m	10kHz	$H = 1200\text{A/m}$	25°C	9
					100°C	13
Temperature Factor of Permeability	α_μ	$10^{-6}/^\circ\text{C}$	10kHz	$< 0.25\text{ mT}$	5 ~ 25°C	7 ~ 9
					25 ~ 55°C	$< -4 \sim -2$
Hysteresis Material Constant	η_B	$10^{-6}/\text{mT}$	10kHz	1.5-3.0mT	25°C	< 0.3
Curie Temperature	T_c	°C				≥ 250
Resistivity	ρ	Ωm				5.00
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.

