

Material Characteristics (8)

	Symbol	Unit	Measuring Conditions			High μ Wide Temperature Materials		
			Freq.	Flux den.	Temp.	A044	A064	N10
Initial Permeability	μ_i		$\leq 10\text{kHz}$	0.25mT	25°C	4000 \pm 25%	6000 \pm 25%	10000 \pm 30%
					-20°C	-	-	> 9000
Relative Loss Factor	$\tan\delta/\mu_i$	10^{-6}	10kHz	< 0.25mT	25°C	< 8	< 8	< 10
			100kHz		25°C	< 40	< 40	< 90
Saturation Flux Density	B_s	mT	10kHz	H = 1200A/m	25°C	450	470	380
					100°C	315	330	130
Remanence	B_r	mT	10kHz	H = 1200A/m	25°C	55	135	160
					100°C	45	115	110
Temperature Factor of Permeability	α_F	$10^{-6}/^\circ\text{C}$	10kHz	< 0.25 mT	0 ~ 20°C	-1 ~ 1	-1 ~ 1	-1 ~ 0
					20 ~ 70°C	-1 ~ 1	-1 ~ 1	-1 ~ 1
Hysteresis Material Constant	η_B	$10^{-6}/\text{mT}$	10kHz	1.5-3.0mT	25°C	< 0.5	< 0.5	< 0.5
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25 mT	25°C	< 2	< 2	< 2
Curie Temperature	T_c	°C				≥ 170	≥ 170	≥ 100
Resistivity	ρ	Ωm				1.00	1.00	0.12
Density	d	g/cm^3				4.90	4.90	5.00

Note: Material characteristics are typical for a toroid core.

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