

## Material Characteristics (9)

	Symbol	Unit	Measuring Conditions			For Wide Temperature LAN Materials		
			Freq.	Flux den.	Temp.	A043	A062	N07
Initial Permeability	$\mu_i$		$\leq 10\text{kHz}$	0.25mT	25°C	4500 $\pm$ 25%	6000 $\pm$ 25%	7000 $\pm$ 25%
Relative Loss Factor	$\tan\delta/\mu_i$	10 <sup>-6</sup>	10kHz	< 0.25mT	25°C	< 10	< 10	< 5
			100kHz		25°C	< 10	< 30	< 30
Saturation Flux Density	Bs	mT	10kHz	H = 1200A/m	25°C	460	460	400
					100°C	300	320	220
Remanence	Br	mT	10kHz	H = 1200A/m	25°C	65	100	70
					100°C	60	80	60
Temperature Factor of Permeability	$\alpha_F$	10 <sup>-6</sup> /°C	10kHz	< 0.25 mT	0 ~ 20°C	1 ~ 2	1 ~ 3	-1 ~ 1
					20 ~ 70°C	-1 ~ 1	-1 ~ 1	-1 ~ 1
Hysteresis Material Constant	$\eta_B$	10 <sup>-6</sup> /mT	10kHz	1.5-3.0mT	25°C	< 0.5	< 0.5	< 0.2
Disaccommodation Factor	D <sub>F</sub>	10 <sup>-6</sup>	10kHz	< 0.25 mT	25°C	< 2	< 2	< 2
Curie Temperature	T <sub>c</sub>	°C				≥ 160	≥ 160	≥ 130
Resistivity	$\rho$	Ωm				0.20	0.20	0.15
Density	d	g/cm <sup>3</sup>				4.85	4.85	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.