

## Material Characteristics (7)

	Symbol	Unit	Measuring Conditions			High $\mu$ & Tc For Automotives Materials	
			Freq.	Flux den.	Temp.	A072 <b>NEW</b>	A104
Initial Permeability	$\mu_i$		$\leq 10\text{kHz}$	0.25mT	25°C	7000 $\pm$ 25%	10000 $\pm$ 30%
Relative Loss Factor	$\tan\delta/\mu_i$	10 <sup>-6</sup>	10kHz	< 0.25mT	25°C	< 5	< 10
			100kHz		25°C	< 15	< 30
Saturation Flux Density	Bs	mT	10kHz	H = 1200A/m	25°C	485	460
					100°C	340	295
Remanence	Br	mT	10kHz	H = 1200A/m	25°C	95	105
					100°C	80	105
Temperature Factor of Permeability	$\alpha_F$	10 <sup>-6</sup> /°C	10kHz	< 0.25 mT	0 ~ 20°C	1.5 ~ 3.5	1 ~ 3
					20 ~ 70°C	-1.5 ~ 1.5	-1.5 ~ 0
Hysteresis Material Constant	$\eta_B$	10 <sup>-6</sup> /mT	10kHz	1.5-3.0mT	25°C	< 1.0	< 0.5
Disaccommodation Factor	D <sub>F</sub>	10 <sup>-6</sup>	10kHz	< 0.25 mT	25°C	< 1.0	< 2.0
Curie Temperature	T <sub>c</sub>	°C				$\geq 180$	$\geq 155$
Resistivity	$\rho$	$\Omega\text{m}$				0.20	0.15
Density	d	g/cm <sup>3</sup>				4.90	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.