

Material Characteristics (16)

	Symbol	Unit	Measuring Conditions			Automotive High Bs Materials					
			Freq.	Flux den.	Temp.	B25	B30	B40	B45	B60	B90
Initial Permeability	μ_i		≤10kHz	0.25mT	25°C	250 ± 25%	300 ± 25%	400 ± 25%	450 ± 25%	600 ± 25%	900 ± 25%
Saturation Flux Density	Bs	mT	10kHz	H = 4000A/m	25°C	445	470	430	450	430	390
Remanence	Br	mT	10kHz	H = 4000A/m	25°C	320	250	300	270	300	250
Coercivity	Hc	A/m	10kHz	H = 4000A/m	25°C	95	80	45	49	40	38
Relative Loss Factor	$\tan\delta/\mu_i$	10 ⁻⁶	100kHz	< 0.25mT	25°C	70	60	40	40	25	13
Temperature Factor of Permeability	α_F	10 ⁻⁶ /°C	10kHz	< 0.25 mT	20 ~ 60°C	12	16	10	15	12	8
Curie Temperature	Tc	°C				≥ 250	≥ 300	≥ 240	≥ 240	≥ 210	≥ 180
Resistivity	ρ	Ωm				> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶
Density	d	g/cm ³				5.20	5.20	5.20	5.20	5.20	5.20

Note: Material characteristics are typical for a toroid core.

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