

Material Characteristics (14)

	Symbol	Unit	Measuring Conditions			Automotive EMI-Suppression Materials							
			Freq.	Flux den.	Temp.	D1C	D25	D27	D28	D30	D35	D37 <small>(NEW)</small>	D40
Initial Permeability	μ_i		≤10kHz	0.25mT	25°C	350 ± 25%	500 ± 25%	700 ± 25%	800 ± 25%	1000 ± 25%	1100 ± 25%	1500 ± 25%	2000 ± 25%
Saturation Flux Density	Bs	mT	10kHz	H = 4000A/m	25°C	360	390	365	365	340	-	-	-
				H = 1200A/m		-	-	-	-	-	305	290	275
Remanence	Br	mT	10kHz	H = 4000A/m	25°C	255	260	235	180	115	-	-	-
				H = 1200A/m		-	-	-	-	-	140	150	115
Coercivity	Hc	A/m	10kHz	H = 4000A/m	25°C	31	58	20	26	28	-	-	-
				H = 1200A/m		-	-	-	-	-	22	20	8
Relative Loss Factor	$\tan\delta/\mu_i$	10 ⁻⁶	0.1MHz	< 0.25mT	25°C	-	-	20	20	35	20	10	18
			1MHz			30	248	-	-	-	-	-	
Temperature Factor of Permeability	α_F	10 ⁻⁶ /°C	10kHz	< 0.25mT	20 ~ 80°C	≤ 50	≤ 35	≤ 7	≤ 5	≤ 6	≤ 2	≤ 4	≤ 20
					-50 ~ 80°C	-	-	-	≤ 1.5	-	-	-	-
Curie Temperature	Tc	°C				≥ 160	≥ 180	≥ 150	≥ 150	≥ 140	≥ 120	≥ 110	≥ 90
Resistivity	ρ	Ωm				> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶
Density	d	g/cm ³				5.00	5.00	4.80	5.00	5.00	5.00	5.00	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.