

## Material Characteristics (2)

	Symbol	Unit	Measuring Conditions			Wide Temperature Low Loss Materials			
			Freq.	Flux den.	Temp.	P45	P451	P452	P47
<b>Initial Permeability</b>	$\mu_i$		≤ 10kHz	0.25mT	25°C	3100 ± 25%	3800 ± 25%	3000 ± 25%	3000 ± 25%
<b>Amplitude Permeability</b>	$\mu_a$		25kHz	200mT	25°C	> 5000	> 5000	> 3900	> 4500
					100°C	> 5000	> 5000	> 4450	> 4500
<b>Power Loss</b>	Pv	KW/m <sup>3</sup>	100kHz	200mT	25°C	360	270	310	340
					100°C	260	310	380	350
			300kHz	100mT	25°C	400	295	300	350
					100°C	350	385	260	350
			500kHz	50mT	25°C	200	165	100	230
					100°C	200	230	120	230
<b>Saturation Flux Density</b>	Bs	mT	10kHz	H = 1200A/m	25°C	530	540	520	520
					100°C	405	420	415	420
<b>Remanence</b>	Br	mT	10kHz	H = 1200A/m	25°C	80	70	100	100
					100°C	50	40	80	70
<b>Coercivity</b>	Hc	A/m	10kHz	H = 1200A/m	25°C	8	8	13	11
					100°C	5	6	11	8
<b>Hysteresis Material Constant</b>	$\eta_B$	10 <sup>-6</sup> /mT	10kHz	1.5-3.0mT	25°C	< 0.6	< 0.6	< 0.6	< 0.6
<b>Disaccommodation Factor</b>	D <sub>F</sub>	10 <sup>-6</sup>	10kHz	< 0.1 mT	25°C	< 1	< 1	< 1	< 1
<b>Curie Temperature</b>	Tc	°C				≥ 215	≥ 215	≥ 215	≥ 220
<b>Resistivity</b>	$\rho$	Ωm				5.00	5.00	5.00	5.00
<b>Density</b>	d	g/cm <sup>3</sup>				4.90	4.90	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.