

## Material Characteristics (19)

	Symbol	Unit	Measuring Conditions			Wide Temperature RFID Materials			
			Freq.	Flux den.	Temp.	F10	F52	F80	F100 <b>(NEW)</b>
Initial Permeability	$\mu_i$		$\leq 10\text{kHz}$	0.25mT	25°C	100 ± 25%	500 ± 25%	800 ± 25%	1000 ± 25%
Saturation Flux Density	Bs	mT	10kHz	H = 4000A/m	25°C	330	330	360	335
Remanence	Br	mT	10kHz	H = 4000A/m	25°C	185	150	155	140
Coercivity	Hc	A/m	10kHz	H = 4000A/m	25°C	220	70	45	33
Relative Loss Factor	$\tan\delta/\mu_i$	10 <sup>-6</sup>	0.1MHz	< 0.25mT	25°C	-	20	20	16
			1MHz			55	-	-	-
Temperature Factor of Permeability	$\alpha_F$	10 <sup>-6</sup> /°C	10kHz	< 0.25mT	20 ~ 60°C	-	1 ~ 2	-1 ~ 1	-1 ~ 1
					20 ~ 80°C	$\leq 35$	-	-	-
Curie Temperature	Tc	°C				$\geq 170$	$\geq 140$	$\geq 150$	$\geq 130$
Resistivity	$\rho$	$\Omega\text{m}$				$> 10^6$	$> 10^6$	$> 10^6$	$> 10^6$
Density	d	g/cm <sup>3</sup>				5.10	5.10	5.10	5.10

Note: Material characteristics are typical for a toroid core.

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