



<sup>1)</sup> gapped (one-sided)

FEP0031-N

## Material Characteristics (7)

	Symbol	Unit	Measuring Conditions			High Permeability Materials			
			Freq.	Flux den.	Temp.	A10	A102	A121	A151
Initial Permeability	$\mu_i$		$\leq 10\text{kHz}$	0.25mT	25°C	10000 $\pm$ 30%	10000 $\pm$ 30%	12000 $\pm$ 30%	15000 $\pm$ 30%
Relative Loss Factor	$\tan\delta/\mu_i$	$10^{-6}$	10kHz	$< 0.25\text{mT}$	25°C	$< 10$	$< 10$	$< 10$	$< 10$
			100kHz		25°C	$< 60$	$< 60$	$< 60$	$< 110$
Saturation Flux Density	B <sub>ms</sub>	mT	10kHz	H = 1200A/m	25°C	410	380	380	400
					100°C	210	180	180	170
Remanence	B <sub>rms</sub>	mT	10kHz	H = 1200A/m	25°C	140	95	130	220
					100°C	110	75	110	100
Temperature Factor of Permeability	$\alpha_F$	$10^{-6}/^\circ\text{C}$	10kHz	$< 0.25\text{ mT}$	0 ~ 20°C	0 ~ 1.5	-1 ~ 1	0 ~ 1.5	-1 ~ 1
					20 ~ 70°C	-0.5 ~ 1	-1 ~ 1	-0.5 ~ 1	-1 ~ 1
Hysteresis Material Constant	$\eta_B$	$10^{-6}/\text{mT}$	10kHz	1.5-3.0mT	25°C	$< 0.5$	$< 1$	$< 0.5$	$< 0.5$
Disaccommodation Factor	D <sub>F</sub>	$10^{-6}$	10kHz	$< 0.25\text{ mT}$	25°C	$< 2$	$< 2$	$< 2$	$< 2$
Curie Temperature	T <sub>c</sub>	°C				130	120	110	110
Resistivity	$\rho$	$\Omega\text{m}$				0.15	0.15	0.12	0.10
Density	d	g/cm <sup>3</sup>				4.90	4.90	4.90	5.00