

# Material Characteristics

## High Permeability Material

Material		SM-120		
Initial permeability	$\mu_{iac}$			12000 $\pm$ 25%
Relative loss factor	$\tan\delta/\mu_{iac}$	$\times 10^{-6}$	f:10kHz	< 4.0
Saturation flux density (1194A/m)	Bs	mT	25°C	390
Remanence	Br	mT	25°C	80
Coercivity	Hc	A/m	25°C	2
Relative temp. factor	$\alpha_{\mu r}$	$\times 10^{-6}/^{\circ}\text{C}$	20~60°C	-0.2~2.0
Hysteresis material constant	$\eta_B$	$\times 10^{-6}/\text{mT}$	10kHz, 25°C	< 0.5
Curie temperature	Tc	°C		> 115
Density	d	kg/m <sup>3</sup>		$4.95 \times 10^3$
Resistivity	$\rho$	$\Omega\cdot\text{m}$	25°C	> 0.2

Note : 1) Typical values  
 2) The values were obtained with toroidal cores(30X8-20H) at room temperature unless indicated otherwise

