

Material Characteristics

High Permeability Material

Material		SM-50		
Initial permeability	μ_{iac}			5000 \pm 25%
Relative loss factor	$\tan\delta/\mu_{iac}$	$\times 10^{-6}$	f:100kHz	< 7
Saturation flux density (1194A/m)	Bs	mT	25°C	440
Remanence	Br	mT	25°C	70
Coercivity	Hc	A/m	25°C	6
Relative temp. factor	$\alpha\mu r$	$\times 10^{-6}/^\circ\text{C}$	20~60°C	-0.15~1.0
Hysterisis material constant	η_B	$\times 10^{-6}/\text{mT}$	10kHz, 25°C	< 0.5
Curie temperature	Tc	°C		> 150
Density	d	kg/m ³		4.85 $\times 10^3$
Resistivity	ρ	$\Omega\cdot\text{m}$	25°C	> 1.5

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

