

# Material Characteristics

## High Q Material

Material			SM-8T	
Initial permeability	$\mu_{iac}$			800 ±20%
Relative loss factor	$\tan\delta/\mu_{iac}$	$\times 10^{-6}$	f:500kHz	< 25
Saturation flux density (1194A/m)	$B_s$	mT	25°C	480
Remanence	$B_r$	mT	25°C	200
Coercivity	$H_c$	A/m	25°C	40
Relative temp. factor	$\alpha\mu$	$\times 10^{-6}/^\circ\text{C}$	-30~20°C	-0.5~0.5
			0~20°C	
			20~70°C	1.0~2.0
Hysterisis material constant	$\eta_B$	$\times 10^{-6}/\text{mT}$	10kHz, 25°C	< 0.3
Curie temperature	$T_c$	°C		> 250
Density	$d$	kg/m <sup>3</sup>		$4.70 \times 10^3$
Resistivity	$\rho$	$\Omega \cdot \text{m}$	25°C	> 3

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

