



標準材質特性

Material Characteristics

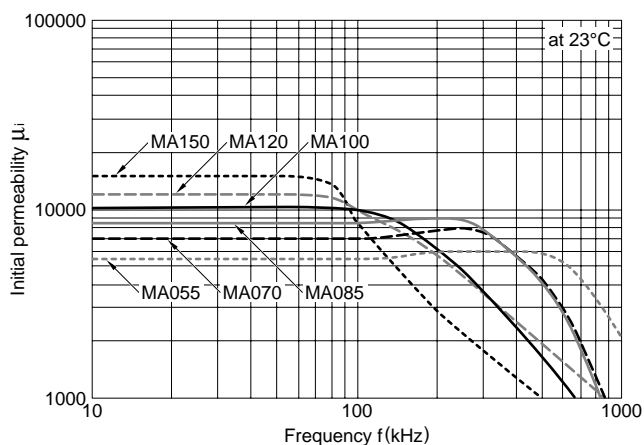
材質名 Material		MA055	MA070	MA085	MA100	MAT10	MA120	MA150
初透磁率 Initial permeability	$\mu_i$	5500 $\pm$ 20%	7000 $\pm$ 25%	8500 $\pm$ 25%	10000 $\pm$ 25%	10000min. (-20 ~ 90°C)	12000 $\pm$ 30%	15000 $\pm$ 30%
実効飽和磁束密度(1200A/m) Saturation flux density at 1200A/m	B <sub>ms</sub> (mT)	434	440	422	415	400	410	400
実効飽和残留磁束密度 Remanence	B <sub>rms</sub> (mT)	67	93	66	76	100	80	85
実効飽和保磁力 Coercivity	H <sub>cms</sub> (A/m)	5.2	3.4	3.3	3.0	1.2	3.0	2.0
相対損失係数(10kHz) Relative loss factor at 10kHz	$\tan\delta/\mu_i \times 10^{-6}$	0.75	1.4	1.3	1.9	8.0	6.4	6.8
初透磁率の相対温度係数 Relative temperature factor	$\alpha\mu_r \times 10^{-6}$	-0.5 ~ 2.0	-0.5 ~ 2.0	-0.5 ~ 2.0	-0.5 ~ 2.0	-1.0 ~ 1.0	-0.5 ~ 2.0	-0.5 ~ 2.0
キュリー温度 Curie temperature	T <sub>c</sub> (°C)	140min.	130min.	130min.	115min.	100min.	115min.	115min.
抵抗率 Resistivity	$\rho$ ( $\Omega$ -m)	0.8min.	0.3min.	0.2min.	0.1min.	0.01min.	0.02min.	0.02min.
密度 Density	d (kg/m <sup>3</sup> )	4.9 $\times$ 10 <sup>3</sup>	4.95 $\times$ 10 <sup>3</sup>	4.95 $\times$ 10 <sup>3</sup>	5.0 $\times$ 10 <sup>3</sup>	5.0 $\times$ 10 <sup>3</sup>	5.0 $\times$ 10 <sup>3</sup>	5.0 $\times$ 10 <sup>3</sup>

1A/m=4 $\pi$  $\times$ 10<sup>-3</sup>Oe, 1mT=10Gauss

MA055 ~ MA100は材質評価用標準コア (R31/19/8Aリングコア), MAT10 ~ MA150は材質評価用標準コア (R20/10/5Aリングコア)における特性を示しています。

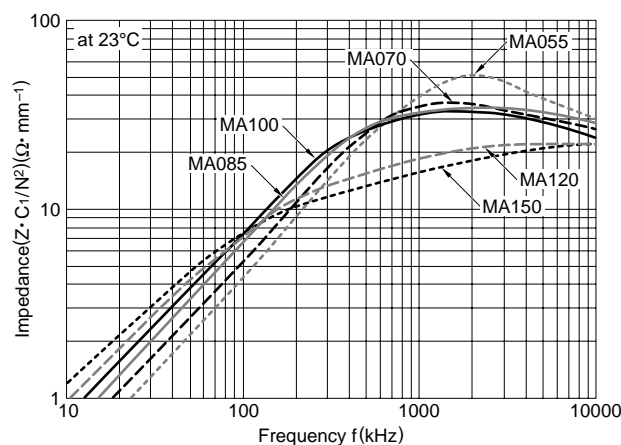
$\mu_i$ -周波数特性

Permeability vs. Frequency(Typical)



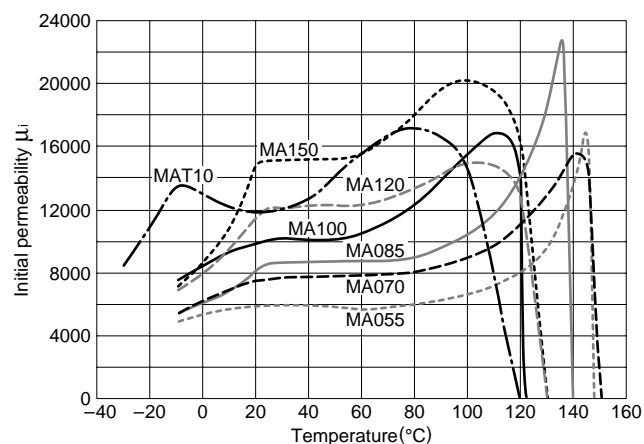
インピーダンス( $Z \cdot C_1/N^2$ )-周波数特性

Impedance( $Z \cdot C_1/N^2$ ) vs. Frequency(Typical)



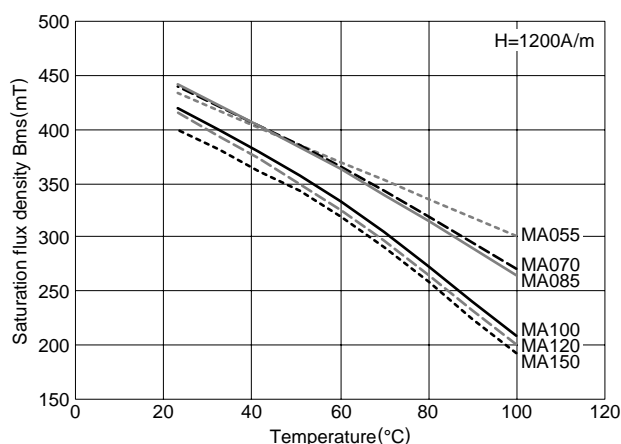
$\mu_i$ -温度特性

Permeability vs. Temperature(Typical)



B<sub>ms</sub>-温度特性

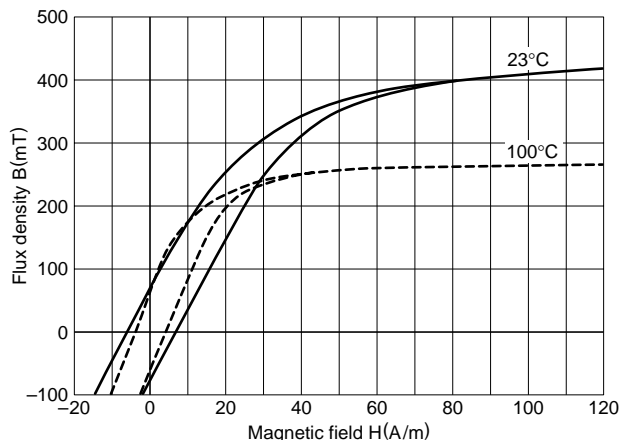
Saturation flux density vs. Temperature(Typical)





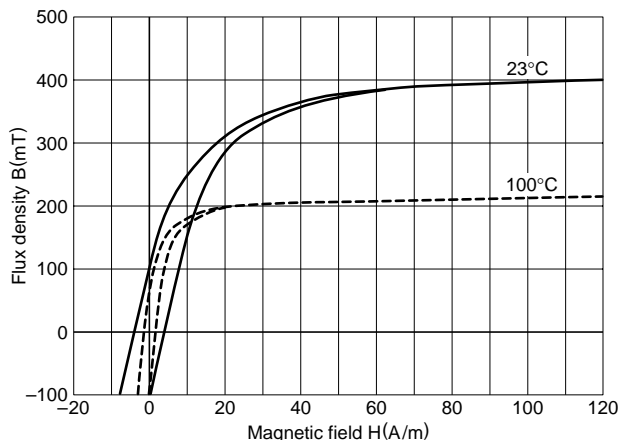
MA055 直流ヒステリシス特性

MA055 Static magnetization curves(Typical)



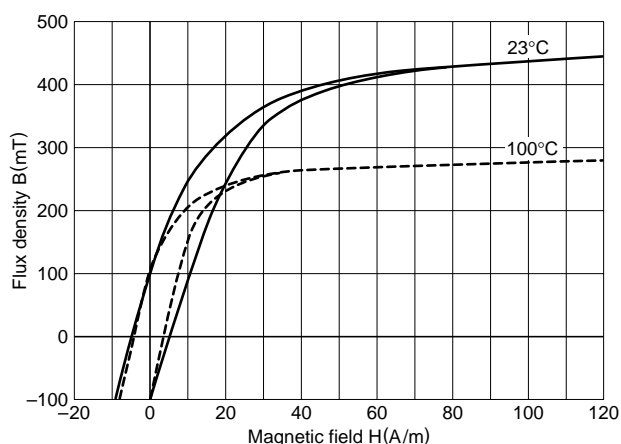
MA100 直流ヒステリシス特性

MA100 Static magnetization curves(Typical)



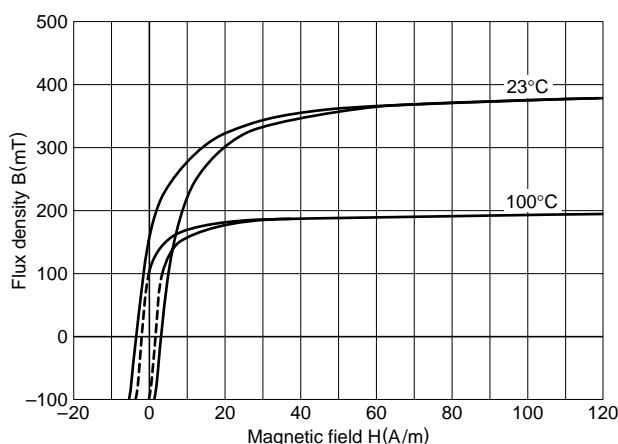
MA070 直流ヒステリシス特性

MA070 Static magnetization curves(Typical)



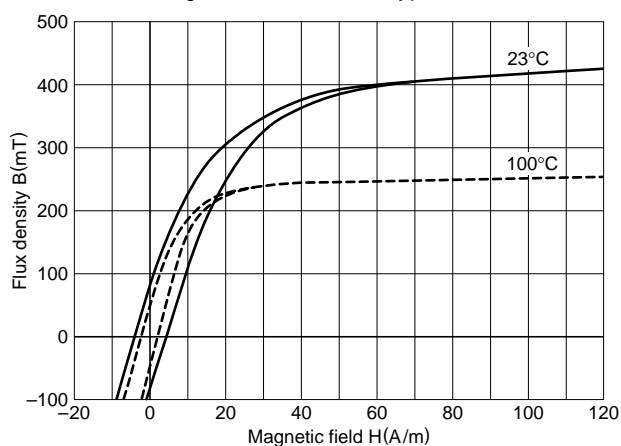
MA120 直流ヒステリシス特性

MA120 Static magnetization curves(Typical)



MA085 直流ヒステリシス特性

MA085 Static magnetization curves(Typical)



MA150 直流ヒステリシス特性

MA150 Static magnetization curves(Typical)

