Material Characteristics (1)

	Symbol	Unit	Measuring Conditions			Telecom High Permeability Materials		
			Freq.	Flux den.	Temp.	A043	A061 NEW	N07 NEW
Initial Permeability	μ_i				25°C	4500 ± 25%	6000 ± 25%	7000 ± 25%
Relative Loss factor	tan δ /μ_i	10^{-6}	10kHz	< 0.25mT	25°C	< 10	< 10	< 5
			100kHz		25°C	< 10	< 15	< 30
Saturation Flux Density	Bms	mT	10kHz	H = 1200A/m	25°C	400	400	400
					100°C	210	220	220
Remanence	Brms	mT	10kHz	H = 1200A/m	25°C	45	50	70
					100°C	35	30	60
Temperature Factor of Permeability	α F	10^{-6}/°C	10kHz	< 0.25mT	0 - 20°C	1 ~ 2	1 ~ 2	-1 ~ 1
					20 - 70°C	-1 ~ 1	-1 ~ 1	-1 ~ 1
Hysteresis Material Constant	η B	10^{-6}/mT	10kHz	1.5-3.0mT	25°C	< 0.5	< 0.5	< 0.4
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	< 2	< 2	< 2
Curie Temperature	Tc	°C				> 130	> 130	> 130
Resistivity	ρ	Ωm				0.20	0.20	0.15
Density	d	g/cm³				4.85	4.85	4.90

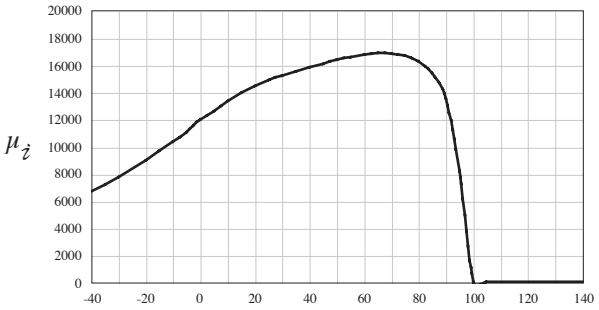
Material Characteristics (2)

	Symbol	Unit	Measuring Conditions			Telecom High Permeability Materials		
			Freq.	Flux den.	Temp.	A101	A12	A15
Initial Permeability	μ_i				25°C	10000 ± 30%	12000 ± 30%	15000 ± 30%
Relative Loss factor	tan δ /μ_i	10^{-6}	10kHz	< 0.25mT	25°C	< 10	< 10	< 10
			100kHz		25°C	< 90	< 90	< 110
Saturation Flux Density	Bms	mT	10kHz	H = 1200A/m	25°C	400	340	350
					100°C	220	120 90°C	120 90°C
Remanence	Brms	mT	10kHz	H = 1200A/m	25°C	175	150	160
					100°C	125	50 90°C	80 90°C
Temperature Factor of Permeability	α F	10^{-6}/°C	10kHz	< 0.25mT	0 - 20°C	-1 ~ 1	-1 ~ 1	-1 ~ 1
					20 - 70°C	-1 ~ 1	-1 ~ 1	-1 ~ 1
Hysteresis Material Constant	η B	10^{-6}/mT	10kHz	1.5-3.0mT	25°C	< 0.5	< 0.5	< 0.5
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	< 2	< 2	< 2
Curie Temperature	Tc	°C				> 130	> 90	> 120
Resistivity	ρ	Ωm				0.15	0.10	0.10
Density	d	g/cm³				4.90	4.90	5.00

Remark:

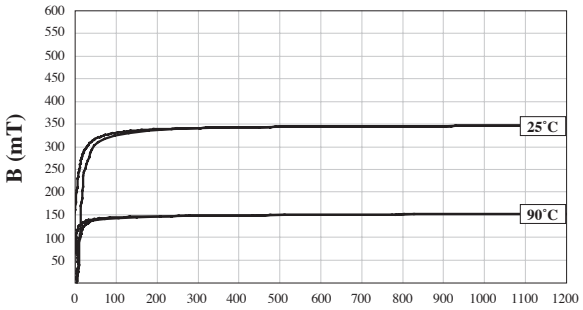
A101: Best THD performance for 10,000μ_i materials.

Initial Permeability V.S. Temperature



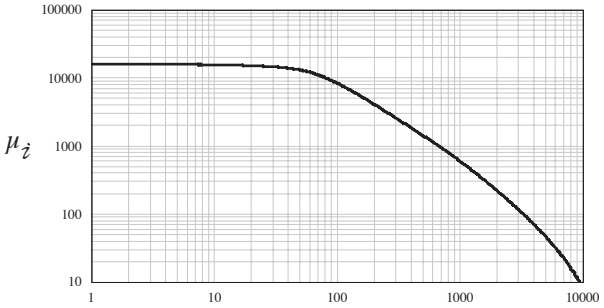
Test Core : T13.4*6.7*5.6

Saturation Flux Density V.S. Magnetic Field



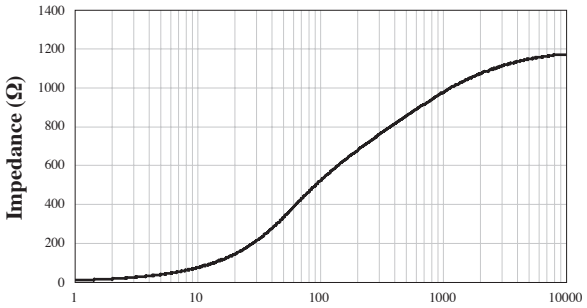
Test Core : T13.4*6.7*5.6

Initial Permeability V.S. Frequency



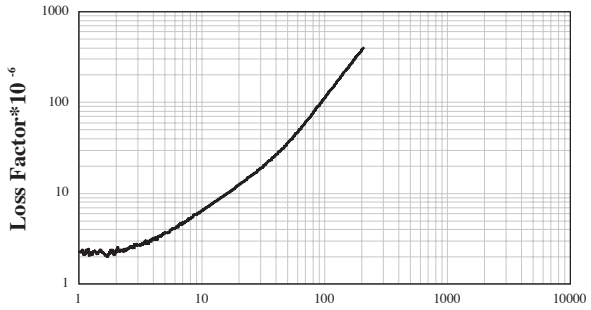
Test Core : T13.4*6.7*5.6

Impedance V.S. Frequency



Test Core : T13.4*6.7*5.6

Loss Factor V.S. Frequency



Test Core : T13.4*6.7*5.6