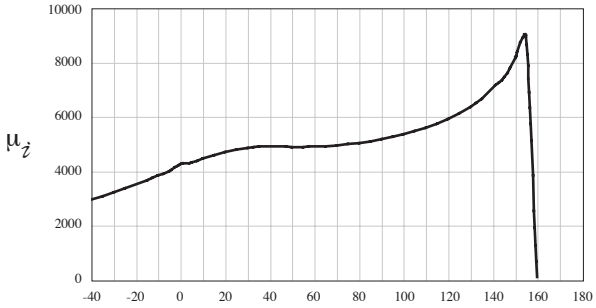
Material Characteristics (3)

	Symbol	Unit	Measuring Conditions			Telecom Materials		
			Freq.	Flux den.	Temp.	N2	N4	N42
Initial Permeability	μ_i				25°C	4000 ± 25%	2500 ± 25%	3800 ± 25%
Relative Loss Factor	$\tan\delta/\mu_i$	10^{-6}	10kHz	< 0.25mT	25°C	< 5	< 7	< 1.5
			100kHz		25°C	< 4	< 3	< 2.5
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	420	450	530
					100°C	260	320	425
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	65	90	75
					100°C	70	100	250
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	8	13	7
					100°C	2	11	12
Temperature Factor of Permeability	αF	10^{-6}/°C	10kHz	< 0.25mT	5 - 25°C	1.8 ~ 2	< 1.3	7 ~ 9
					25 - 55°C	0.3 ~ 0.5	< 1.3	< -4 ~ -2
Hysteresis Material Constant	ηB	10^{-6}/mT	10kHz	1.5-3.0mT	25°C	< 1	< 0.6	< 0.3
Curie Temperature	Tc	°C	10kHz	< 0.25mT		> 150	> 170	> 250
Resistivity	ρ	Ωm				1.80	7.50	5.00
Density	d	g/cm³				4.85	4.70	4.90

Material Characteristics (4)

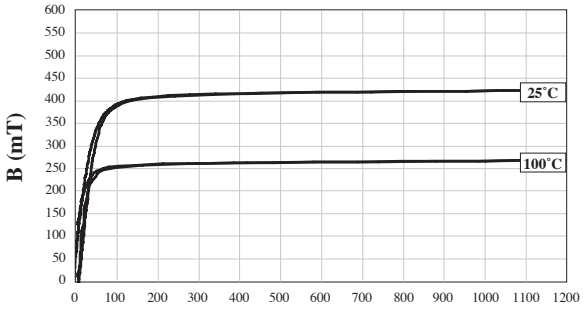
	Symbol	Unit	Measuring Conditions			EMI Materials	
			Freq.	Flux den.	Temp.	N43	N5 NEW
Initial Permeability	μ_i				25°C	750 ± 25%	2000 ± 25%
Relative Loss Factor	$\tan\delta/\mu_i$	10^{-6}	10kHz	< 0.25mT	25°C	< 60	< 1.24
			100kHz		25°C	< 15	< 23
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	490	370
					100°C	400	285
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	240	240
					100°C	190	140
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	23	
					100°C	18	
Temperature Factor of Permeability	αF	10^{-6}/°C	10kHz	< 0.25mT	5 - 25°C	< 2.2	< 1.1
					25 - 55°C	< 1.8	< 5.8
Hysteresis Material Constant	ηB	10^{-6}/mT	10kHz	1.5-3.0mT	25°C	< 2.5 (100KHz)	< 0.36
Curie Temperature	Tc	°C	10kHz	< 0.25mT		> 250	> 130
Resistivity	ρ	Ωm				2.00	140
Density	d	g/cm³				4.70	5.09

Initial Permeability V.S. Temperature



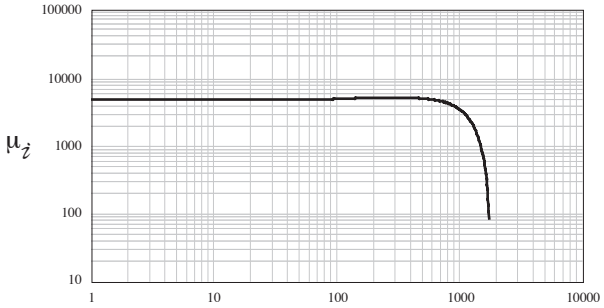
Test Core : T25*15*10

Saturation Flux Density V.S. Magnetic Field



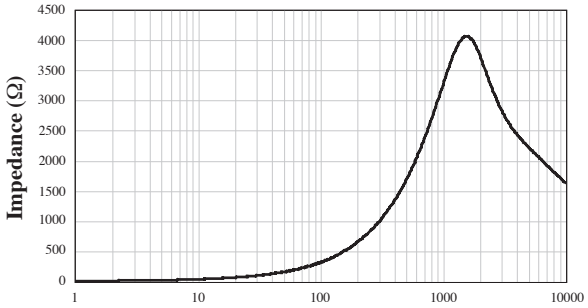
Test Core : T25*15*10

Initial Permeability V.S. Frequency



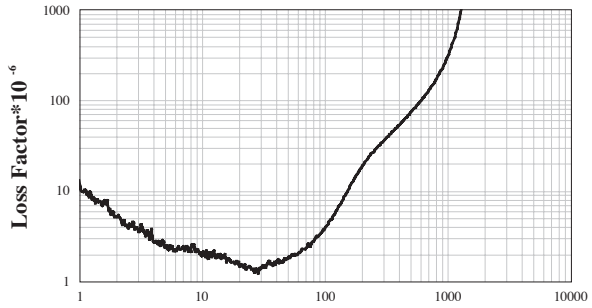
Test Core : T25*15*10

Impedance V.S. Frequency



Test Core : T25*15*10

Loss Factor V.S. Frequency



Test Core : T25*15*10