

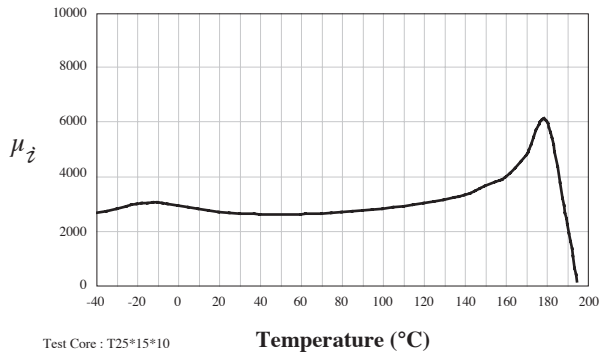
### Material Characteristics (3)

	Symbol	Unit	Measuring Conditions			Telecom Materials		
			Freq.	Flux den.	Temp.	N2	N4	N42
<b>Initial Permeability</b>	$\mu_z$				25°C	4000 ± 25%	2500 ± 25%	3800 ± 25%
<b>Relative Loss Factor</b>	$\tan \delta / \mu_z$	10 <sup>-6</sup>	10kHz	< 0.25mT	25°C	< 5	< 7	< 1.5
			100kHz		25°C	< 4	< 3	< 2.5
<b>Saturation Flux Density</b>	B <sub>ms</sub>	mT	10kHz	H=1200A/m	25°C	420	450	530
					100°C	260	320	425
<b>Remanence</b>	B <sub>rms</sub>	mT	10kHz	H=1200A/m	25°C	65	90	75
					100°C	70	100	250
<b>Coercivity</b>	H <sub>c</sub>	A/m	10kHz	H=1200A/m	25°C	8	13	7
					100°C	2	11	12
<b>Temperature Factor of Permeability</b>	F	10 <sup>-6</sup> /°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
<b>Hysteresis Material Constant</b>	B	10 <sup>-6</sup> /mT	10kHz	1.5-3.0mT	25°C	< 1	< 0.6	< 0.3
<b>Curie Temperature</b>	T <sub>c</sub>	°C	10kHz	< 0.25mT		> 150	> 170	> 250
<b>Resistivity</b>		Ωm				1.80	7.50	5.00
<b>Density</b>	d	g/cm <sup>3</sup>				4.85	4.70	4.90

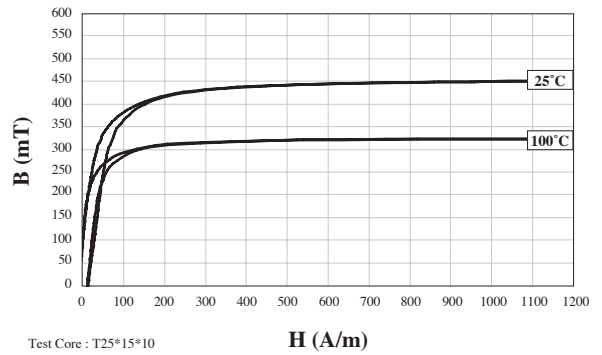
### Material Characteristics (4)

	Symbol	Unit	Measuring Conditions			EMI Materials	
			Freq.	Flux den.	Temp.	N43	N5 <b>NEW</b>
<b>Initial Permeability</b>	$\mu_z$				25°C	750 ± 25%	2000 ± 25%
<b>Relative Loss Factor</b>	$\tan \delta / \mu_z$	10 <sup>-6</sup>	10kHz	< 0.25mT	25°C	< 60	< 1.24
			100kHz		25°C	< 15	< 23
<b>Saturation Flux Density</b>	B <sub>ms</sub>	mT	10kHz	H=1200A/m	25°C	490	370
					100°C	400	285
<b>Remanence</b>	B <sub>rms</sub>	mT	10kHz	H=1200A/m	25°C	240	240
					100°C	190	140
<b>Coercivity</b>	H <sub>c</sub>	A/m	10kHz	H=1200A/m	25°C	23	
					100°C	18	
<b>Temperature Factor of Permeability</b>	F	10 <sup>-6</sup> /°C	10kHz	< 0.25mT	5 - 25°C	< 2.2	< 1.1
					25 - 55°C	< 1.8	< 5.8
<b>Hysteresis Material Constant</b>	B	10 <sup>-6</sup> /mT	10kHz	1.5-3.0mT	25°C	< 2.5 <sup>(100kHz)</sup>	< 0.36
<b>Curie Temperature</b>	T <sub>c</sub>	°C	10kHz	< 0.25mT		> 250	> 130
<b>Resistivity</b>		Ωm				2.00	140
<b>Density</b>	d	g/cm <sup>3</sup>				4.70	5.09

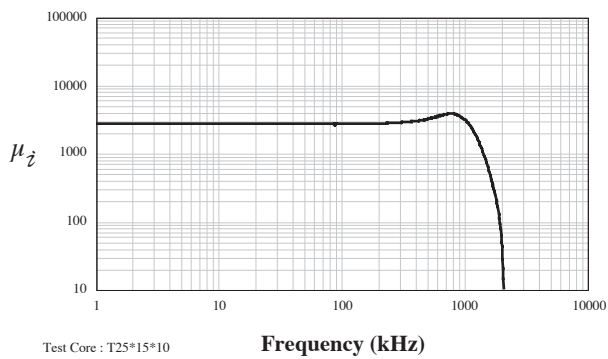
**Initial Permeability V.S. Temperature**



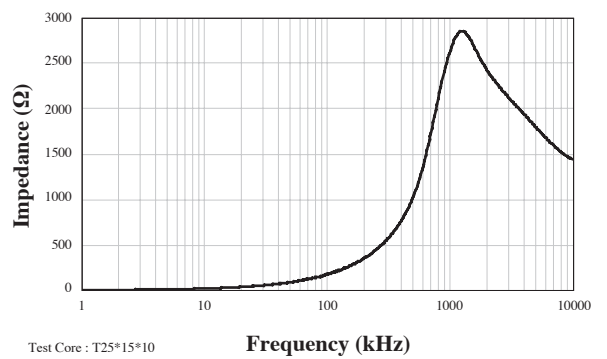
**Saturation Flux Density V.S. Magnetic Field**



**Initial Permeability V.S. Frequency**



**Impedance V.S. Frequency**



**Loss Factor V.S. Frequency**

