AT5000 MATERIAL

PARAMETER	SYMBOL	Standard Conditions of test	UNIT	AT5000
Initial Permeability (nominal)	μi	B<=0.1mT 10kHz 25℃	---	5000 +/-20%
Saturation Flux Density (typical)	B_{sat}	H=796 A/m =10 Oe 25℃	mT	460
Remanent Flux Density (typical)	B_{rem}	H → 0 (from near saturation) 10kHz 25℃	mT	170
Coercivity (typical)	H_c	B → 0 (from near saturation) 10kHz 25℃	A/m	12
Loss Factor (maximum)	$\frac{\tan\delta\,(r+e)}{\mu_i}$	B<0.1mT 25℃ 100kHz	10^{-6}	20
Temperature Factor	$\frac{\Delta\mu}{\mu_i^2\Delta T}$	+25℃ to +55℃ B<0.1mT 10kHz	10^{-6}/℃	-1 to +2
Curie Temperature (minimum)	θ_c	B<0.1mT 10kHz	℃	160
Hysteresis Material Constant (max)	η_B	B from 1.5 to 3.0mT 10kHz 25℃	10^{-6}/mT	1.1
Resistivity (typical)	ρ	1 V/cm 25℃	Ohm-cm	20

A wide band manganese zinc ferrite . AT5000 has low losses at frequencies below 100kHz, typical applications include mains filtering and pulse transformers.
Typical core shapes include Rings, EP and RM cores.

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