



## MnZn Power Ferrite Material

### Material Characteristics

Material name			<b>Manganese Zinc Ferrite</b>
Material grade			<b>SM033</b>
Initial Permeability	10KHz,0.1mT	$\mu$ i	<b>3300<math>\pm</math>25%</b>
Saturation Flux Density (Bs) (H = 1194 A/m)	25°C 120°C	mT	<b>530 380</b>
Residual Flux Density (Br)	25°C 120°C	mT	<b>85 55</b>
Coercive Force (Hc)	25°C 100°C	A/m	<b>15 6</b>
Power Loss (Pv) <i>Tested 100kHz, 200mT</i>	25°C 80°C 120°C	kW/m <sup>3</sup>	<b>350 280 350</b>
Curie Temperature (Tc)		°C	<b>&gt;215</b>
Electrical Resistivity		$\Omega$ .m	<b>2.0</b>
Density		g/cm <sup>3</sup>	<b>4.9</b>

Dare is derived from measurements on a ring core of T25x15x8

This power ferrite material SM033 has achieved low loss in a wide temperature ranges thus can be used at all different operating temperatures compare to conventional power ferrite materials. It can be used for regular switching ,DC to DC converters for automobiles as well as inverter transformers of LCD.



### SM033 Performance graphs

