

## Comparison between Nanocrystalline & Ferrite Core

Basic Magnetic property	Nano-crystalline	Ferrite
Saturate induction / Bs (T)	1.25	0.5
Br (T) (20KHz)	< 0.20	0.2
Core loss (20KHz/0.5T) (W/Kg)	< 25	–
Core loss (50KHz/0.32T) (W/Kg)	< 35	–
Permeability (20KHz) (Gs/Oe)	> 20,000	2,000
Hc (A/m)	< 1.60	6
Magnetostriction ( $\lambda_s$ )	< $2.0 \times 10^{-6}$	4
Resistivity $\delta$ ( $\mu\Omega \cdot \text{cm}$ )	130	$10^6$
Curie temperature Tc ( $^{\circ}\text{C}$ )	570	< 200
Stacking Factor	0.75	–

