

Material Characteristics

TYPE	WIDTH (mm)		Thickness (mm)	
	size	Tolerance	size	Tolerance
TRN(0.8~100)	0.8~100	±0.04	0.02~0.04	±0.002
TRF(0.8~100)				
TRC(0.8~100)				

NOTE:

- TRN model for the Fe-based nanocrystalline alloy;
- TRF iron-based amorphous alloys;
- TRC for the Co-based amorphous alloys.

PERFORMANCE OF AMOROHOUS, NANOCRYSTALLINE ALLOY STRIP

Fe-based amorphous (1K101), nanocrystalline (1K107) cold-rolled silicon steel alloy and features comparison table

Performance indicators	Fe-based amorphous	Silicon steel	Fe-based nanocrystalline alloy
Saturation magnetic flux density Bs(T)	1.5	2.03	1.2
Coercivity Hc(A/m)	<4	<30	<0.8
Maximum permeability	>20×10 ⁴	4×10 ⁴	45×10 ⁴
LOSS Pu(W/kg)	50Hz. 1.3T. Pu<0.13	50Hz. 1.7T. Pu=1.2	20KHz.0.2T. Pu<10
Magnetostriction coefficient (×10 ⁻⁶)	20~30	27	1~2
Resistivity (u Ω-cm)	130	45	90
Density (g/cm ³)	7.18	7.65	7.20
Crystallization temperature T (°C)	550	-----	510
Curie temperature T (°C)	415	746	560
Hardness (hg/mm)	900	181	880
Thickness (um)	20~40	300	20~40