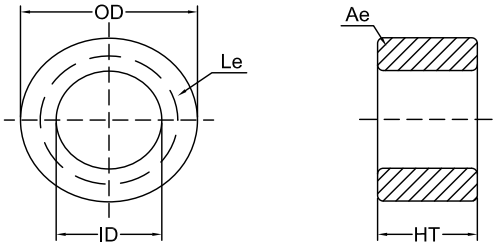
PAIRUI

SPECIFICATION FOR APPROVAL

Material

Production:	Si-Fe Cores
FUAN.P/N:	KSF400-075A
AL:	137(nH/N²)±8%
Material:	75 μ
Coating Color:	Blue
Coating material:	epoxy
Coating Breakdown Voltage: 1500V，0.5mA，2Sec	



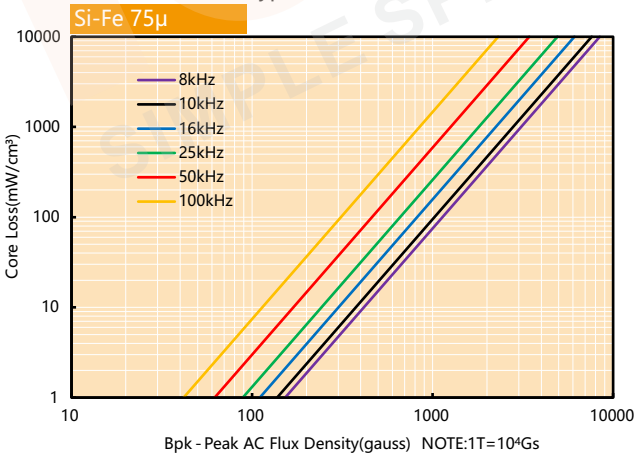
Physical Characteristics

Before Coating			After Coating			Le(cm)	Ae(cm²)	V(cm³)	W(cm²)	Weight (g) (ref.)	Box Quantity (Pieces)
OD(Max.) in/mm	ID(Min.) in/mm	Ht(Max.) in/mm	OD(Max.) mm	ID(Min.) mm	Ht(Max.) mm						
4.000 / 101.60	2.250 / 57.15	0.650 / 16.51	103.12	55.75	17.78	24.271	3.523	85.495	24.398	631.8	25

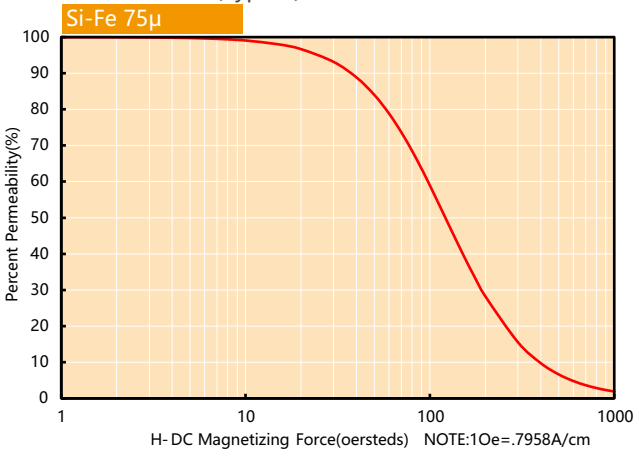
Electrical Parameters(Typical) Temperature(25℃±2℃)

Test Item	Test Condition	Value(Typical)	Test Instrument
Inductance	φ0.80mm/129Ts，20kHz/1V，I=0A (Evenly full windings)	2280μH±8%	CH3302
DC-Bias	φ0.80mm/129Ts，20kHz/1V，I=15A(H=100Oe) (Evenly full windings)	1217μH(Min.)	WK3255B+WK3265B
Core Loss	50kHz/1000Gs	750mW/cm³(Max.)	SY-8219
Remarks	Set the internal resistance of LCR meter to 100Ω.		

Core Loss Curves(Typical)



DC- Bias Curves(Typical)



Si-Fe® Cores (KSF Series) is made from 94% Fe and 6% Si. It is named XFlux by Magnetics and MegaFlux by CSC. It has a saturation flux density of 16000Gs and excellent DC-Bias characteristics. Its core loss is lower than Iron Powder Cores and have no problem of Thermal Aging. It is specially suitable for applying in, High Current Power Choke, Power inductor for energy storage, PFC Chockes and so on. It is also widely applied in solar, wind energy, hybrid powered vehicles. Permeability that we can produce now is 26ui-90ui, toroid and block shape.