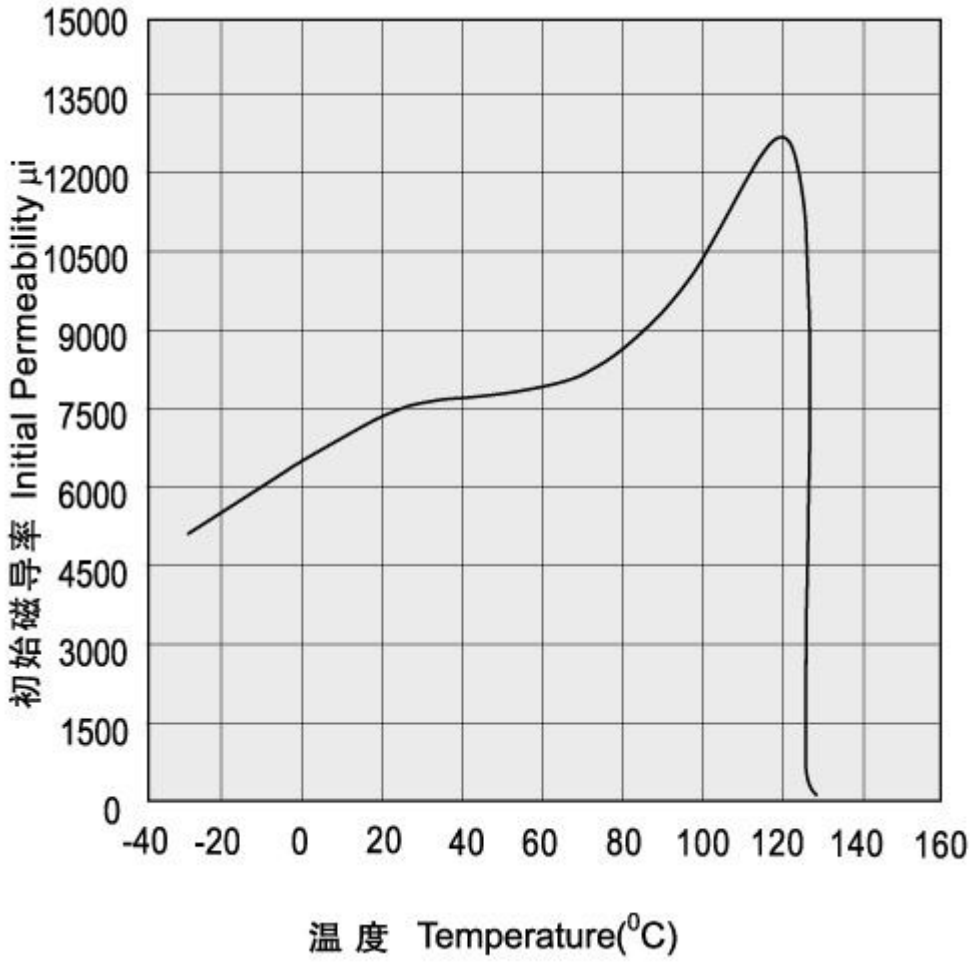
R7K 材料特性

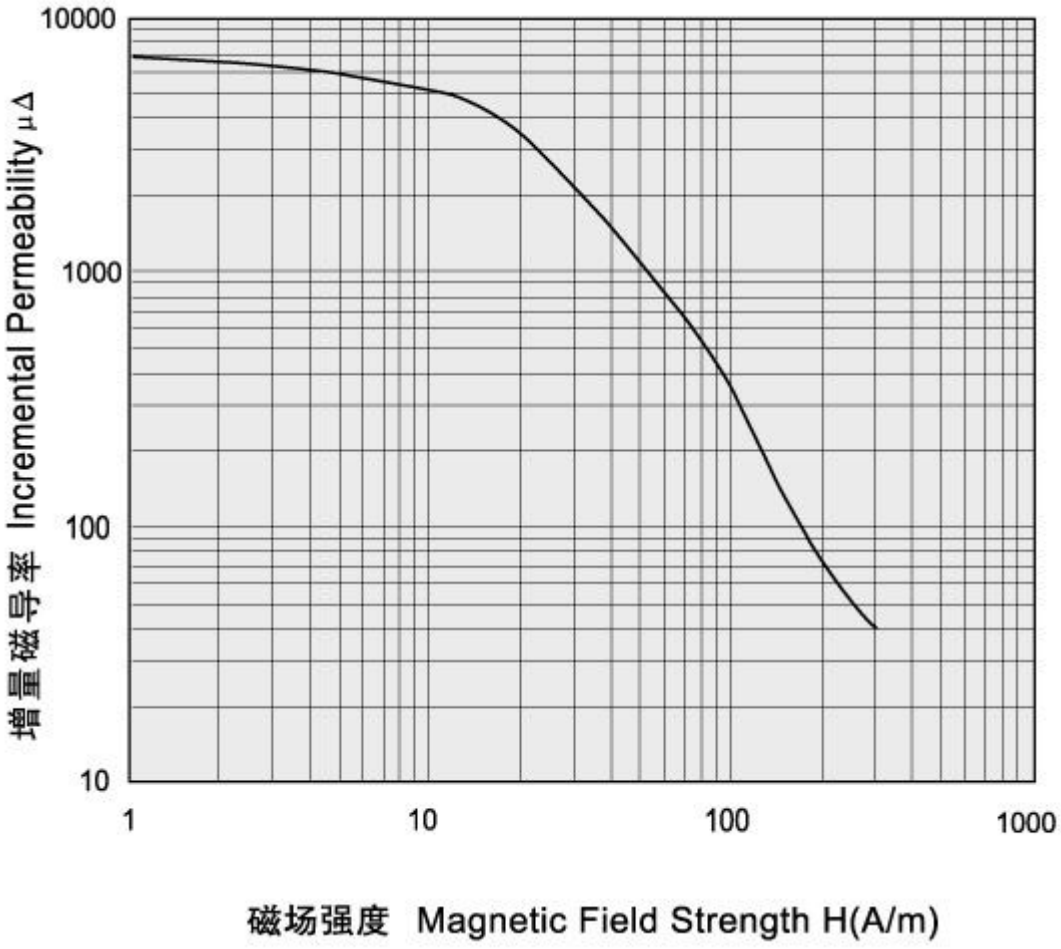
R7K Material Characteristics

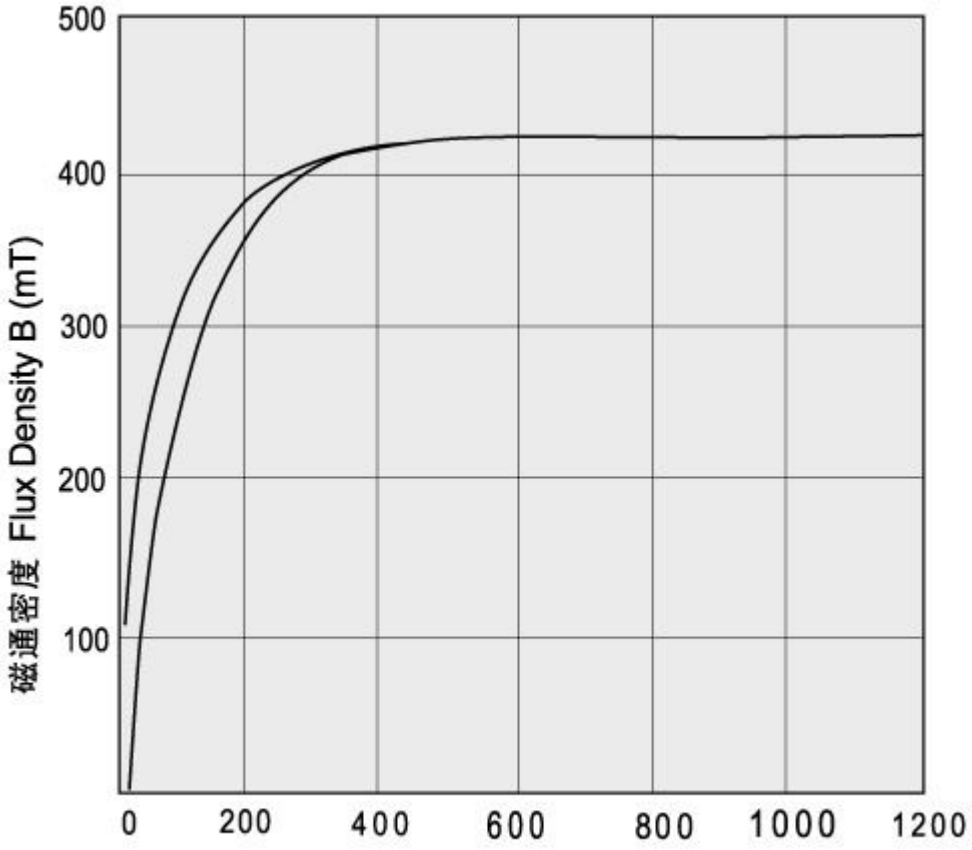
初始磁导率 μi Initial Permeability		7000±25%
比损耗因子 tan δ / μi (100kHz) Relative Loss Factor	$\times 10^{-6}$	＜30.0
饱和磁通密度 Bs（mT） Saturation flux density 1194A/m	mT	420
剩磁 Br(mT) Residual flux density	mT	110
矫顽力 Hc(A/m) Coercivity Force	A/m	7.0
比温度系数αμr (20℃~60℃)Relative Temperature Coefficient	$\times 10^{-6}$/℃	－0.5~2.0
比磁滞损耗系数（ηB） hysteresis material constant 25℃, 10kHz,1.5~3mT	$\times 10^{-6}$/ mT	＜1.2
居里温度 Tc(℃) Curie temperature	℃	＞125
电阻率ρ(Ω.m) Resistivity	Ω.m	0.2
密度d(g/cm^3) Density	(G/cm^3)	4.9

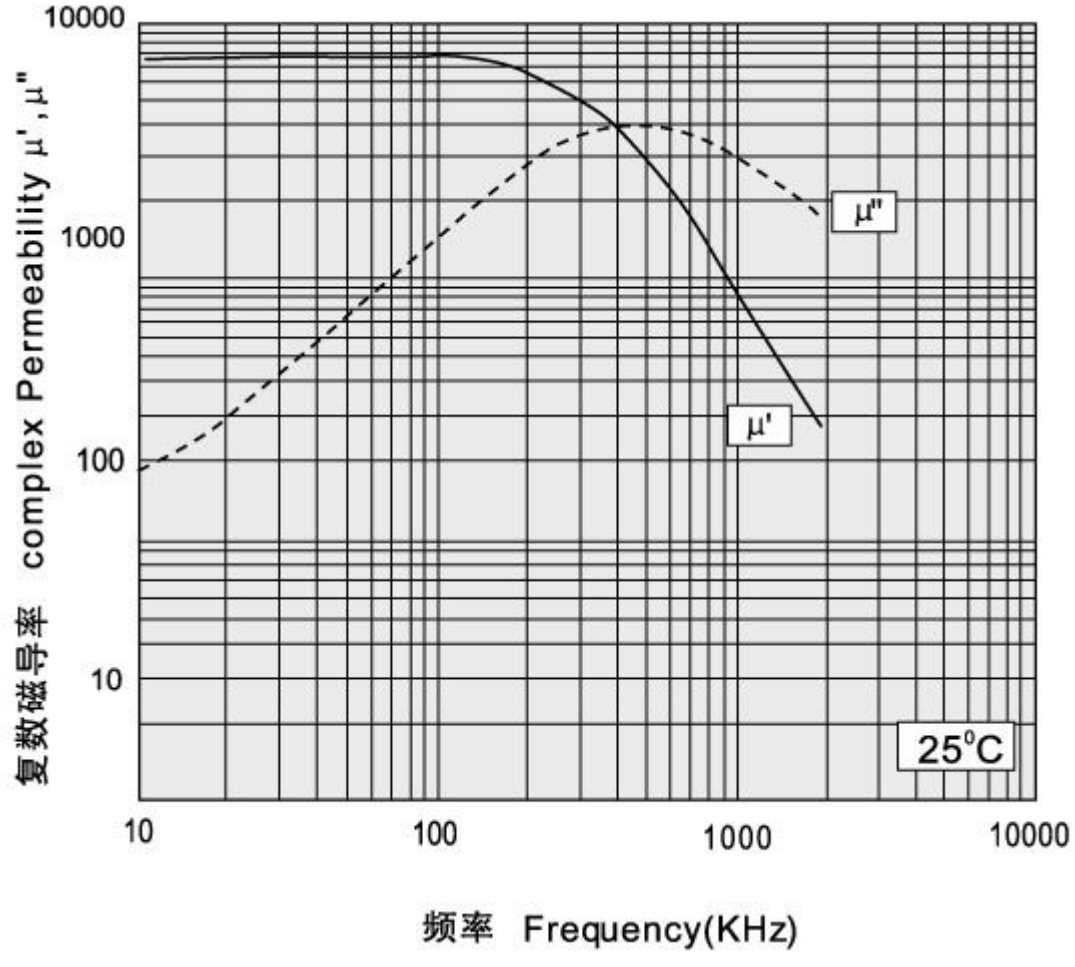
以上数据是根据标准样环φ25×φ15×8 获得的典型数据，有关产品的具体性能会在此基础上有所调整。

The above typical data are calculated from the standard toroid core. The performance of specific parts will vary slightly.


15000
13500
12000
10500
9000
7500
6000
4500
3000
1500
0
初始磁导率 Initial Permeability μi
-40 -20 0 20 40 60 80 100 120 140 160
温 度 Temperature(0C)


10000
1000
100
10
增量磁导率 Incremental Permeability μΔ
1 10 100 1000
磁场强度 Magnetic Field Strength H(A/m)


500
400
300
200
100
磁通密度 Flux Density B (mT)
0
200
400
600
800
1000
1200
磁场强度 Magnetic Field Strength H(A/m)


10000
1000
100
10
复数磁导率 complex Permeability μ', μ"
μ"
μ'
25°C
10
100
1000
10000
频率 Frequency(KHz)