F5K material characteristics:

1 high initial permeability (around 5500)　2 low relative loss factor.

3 The characteristics of initial permeability Vs frequency is excellent.

Material Characteristics	Unit	F5K
μi Initial permeability		5500±25%
Bs Saturation Magnetic Flux Density @H=1194A/m	mT	410
Br Remanence Flux Density	mT	70
Hc Effective Coercivity	A/m	7.2
tanδ/μi (10kHz) Relative loss factor	$\times 10^{-6}$	<3.5
Tc	℃	＞140
Resistivity	Ω・m	0.15
Density	$kg/m^3 \times 10^3$	4.85
α μr Relative temperature coefficient	$\times 10^{-6}$	20～70℃, -0.5～1.8
D_F Disaccommodation factor	$\times 10^{-6}$	<3.0

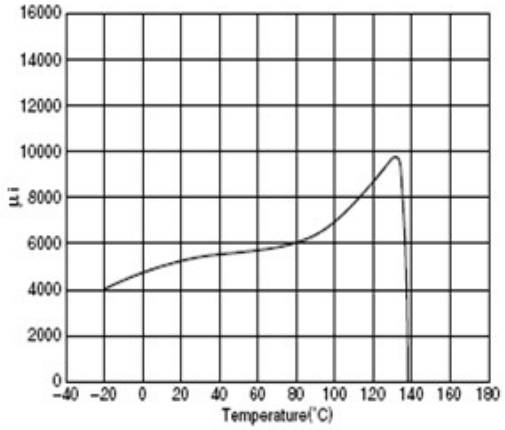

Fig1 Permeability vs. Temperature

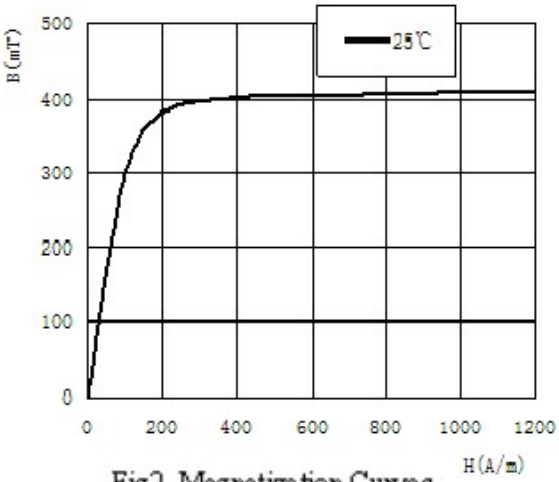

Fig2 Magnetization Curves

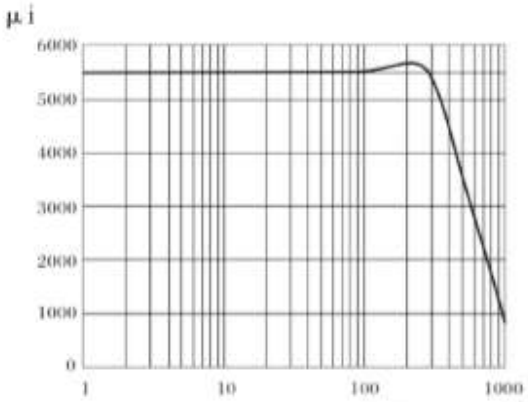

Fig. 3 Permeability vs. Frequency 磁导率随频率的变化

F7K material characteristics:

1 High initial permeability (around 7700) 2 Low relative loss factor.

3 The characteristics of initial permeability Vs frequency is excellent.

Material Characteristics	Unit	F7K
μi Initial permeability		7500±25%
Bs Saturation Magnetic Flux Density @H=1194A/m	mT	420
Br Remanence Flux Density	mT	90
Hc Effective Coercivity	A/m	6
tanδ/μi (10kHz) Relative loss factor	$\times 10^{-6}$	<6.5
Tc	℃	＞130
Resistivity	Ω・m	0.1
Density	$kg/m^3 \times 10^3$	4.9
α μr Relative temperature coefficient	$\times 10^{-6}$	20～70℃, -0.5～1.8
D_F Disaccommodation factor	$\times 10^{-6}$	<3.0

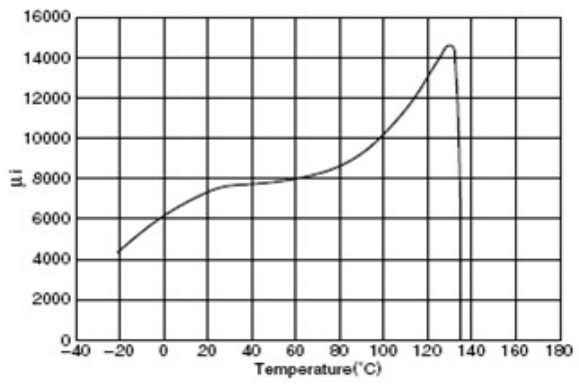

Fig1 Permeability vs. Temperature

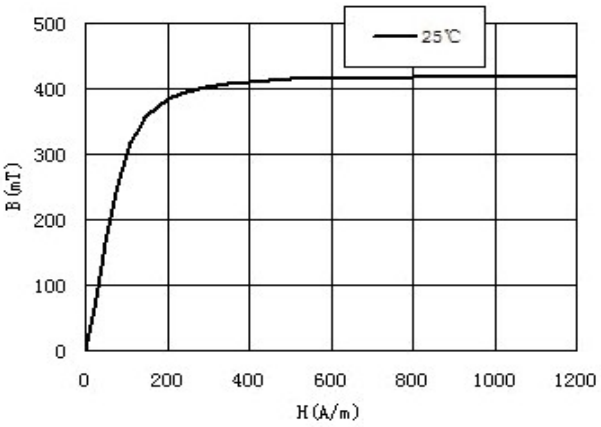

Fig2 Magnetization Curves

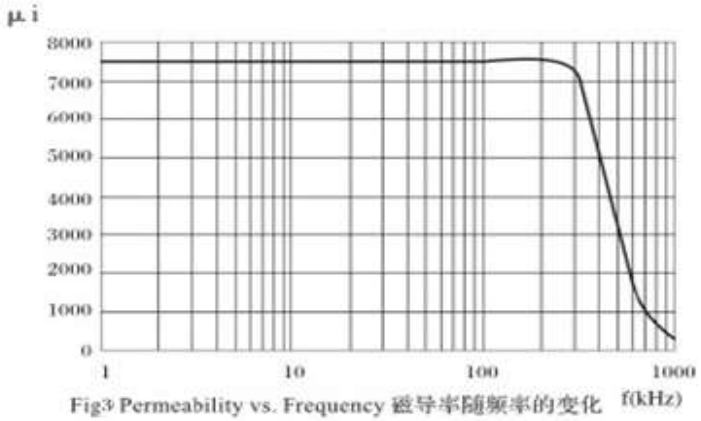

Fig3 Permeability vs. Frequency 磁导率随频率的变化

F10K material characteristics:

1 High initial permeability (around 10000) 2 Low relative loss factor.

3 The characteristics of initial permeability Vs frequency is excellent.

Material Characteristics	Unit	F10K
μi Initial permeability		10000±30%
Bs Saturation Magnetic Flux Density @H=1194A/m	mT	390
Br Remanence Flux Density	mT	90
Hc Effective Coercivity	A/m	6
tanδ/μi (10kHz) Relative loss factor	$\times 10^{-6}$	<7
Tc	℃	>120
Resistivity	Ω·m	0.1
Density	$kg/m^3 \times 10^3$	4.9
α μr Relative temperature coefficient	$\times 10^{-6}$	-0.5～1.5
D_F Disaccommodation factor	$\times 10^{-6}$	<2.0

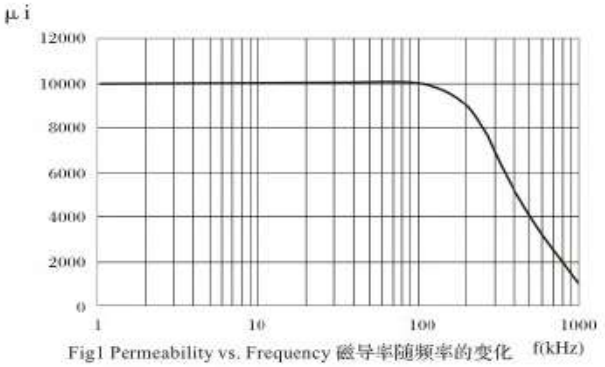

Fig1 Permeability vs. Frequency 磁导率随频率的变化

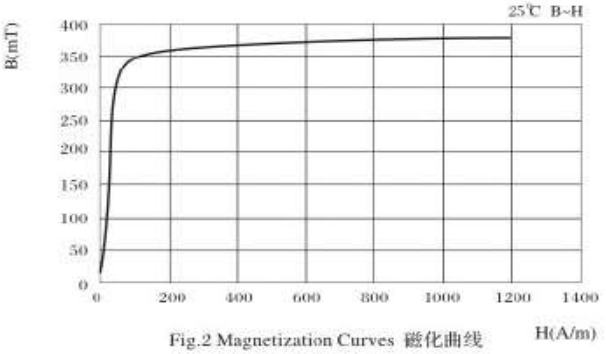

Fig.2 Magnetization Curves 磁化曲线

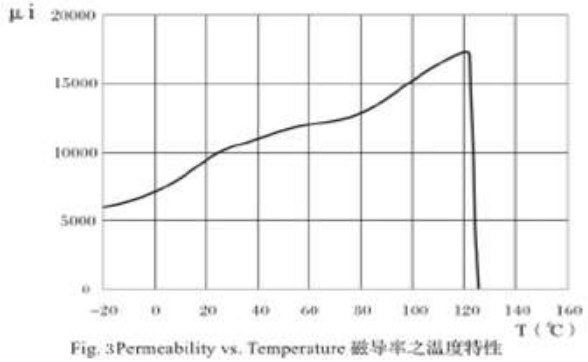

Fig. 3Permeability vs. Temperature 磁导率之温度特性

F12K material characteristics:

1 high initial permeability (around 12000) 2 low relative loss factor.

3 The characteristics of initial permeability Vs frequency is excellent.

Material Characteristics	Unit	F12K
μi Initial permeability		12000±30%
Bs Saturation Magnetic Flux Density @H=1194A/m	mT	360
Br Remanence Flux Density	mT	100
Hc Effective Coercivity	A/m	5
tanδ/μi (10kHz) Relative loss factor	$\times 10^{-6}$	＜7
Tc	℃	＞110
Resistivity	Ω・m	0.1
Density	$kg/m^3 \times 10^3$	4.95
α μr Relative temperature coefficient	$\times 10^{-6}$	-0.5～1.5
D_F Disaccommodation factor	$\times 10^{-6}$	<2.0

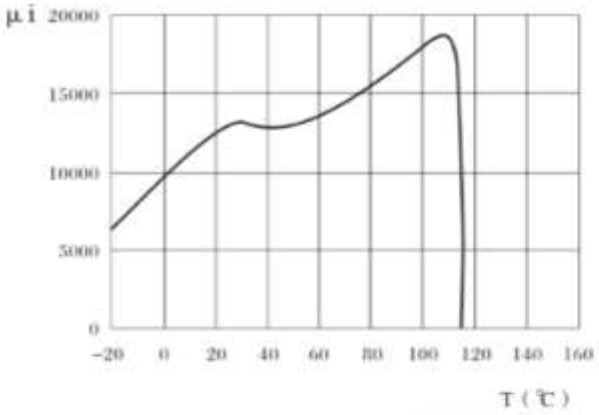

Fig.1 Permeability vs. Temperature 磁导率之温度特性

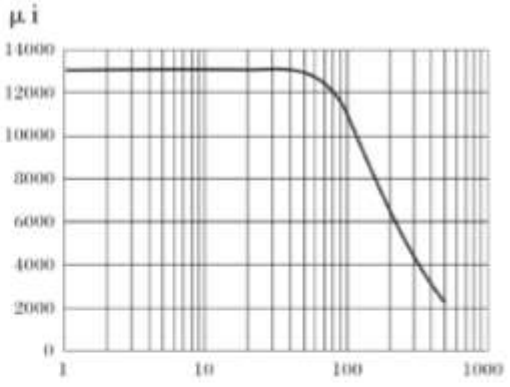

Fig2 Permeability vs. Frequency 功耗随磁通密度之变化 f(kHz)

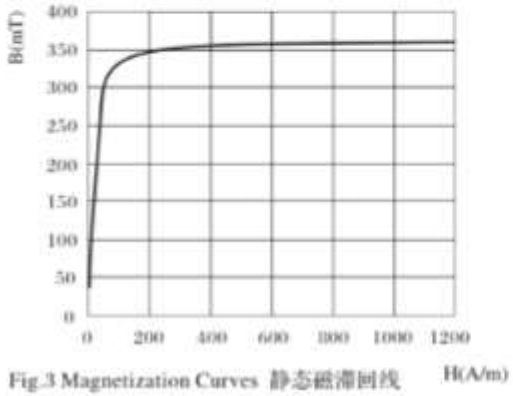

Fig.3 Magnetization Curves 静态磁滞回线

T40 material characteristics:

1 lower power loss material with high saturation flux density.

2 optimized for frequencies up to 200 KHz.

3 The minimum power loss around 95℃.

Material Characteristics			Unit		T40
Initial Permeability					2300±25%
Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	510
			100℃	mT	390
Remanence Flux Density			25℃	mT	95
			100℃	mT	56
Effective Coercivity			25℃	A/m	14.3
			100℃	A/m	9.2
Curie Temperature			℃		≥215
Electrical Resistivity			Ω·m		6.5
Density			kg/m^3		$4.8x10^3$
Core Loss	25kHz 200mT Core loss	25℃	kW/m^3		110
		60℃			75
		100℃			70
	100kHz 200mT Core loss	25℃	kW/m^3		600
		60℃			500
		100℃			410
		120℃			500

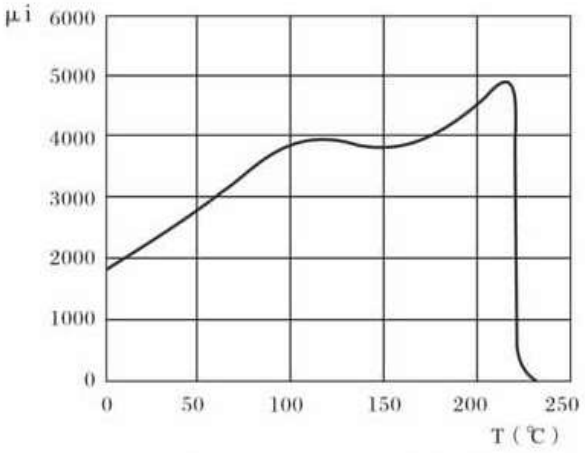

Fig.1 Permeability vs. Temperature 磁导率之温度特性

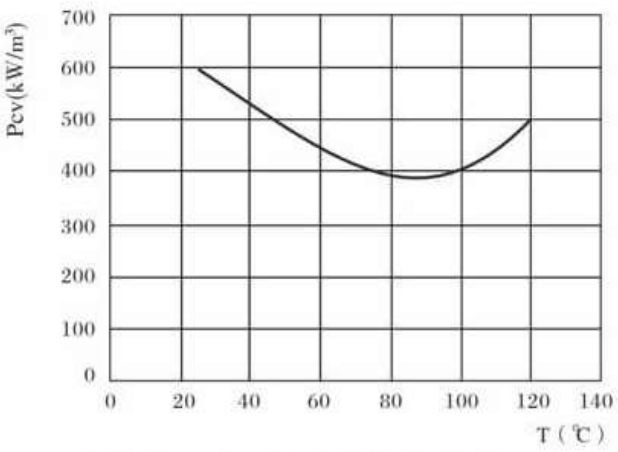

Fig.2 Power Loss(100kHz,200mT) vs. Temperature

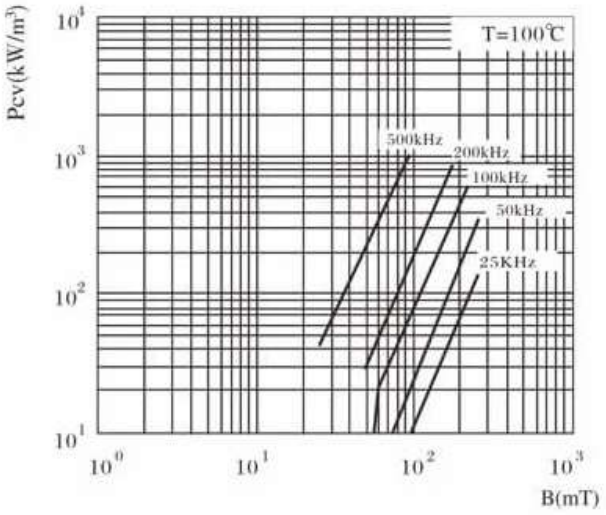

Fig.3Power Loss vs. Flux Density 功耗随磁通密度之变化

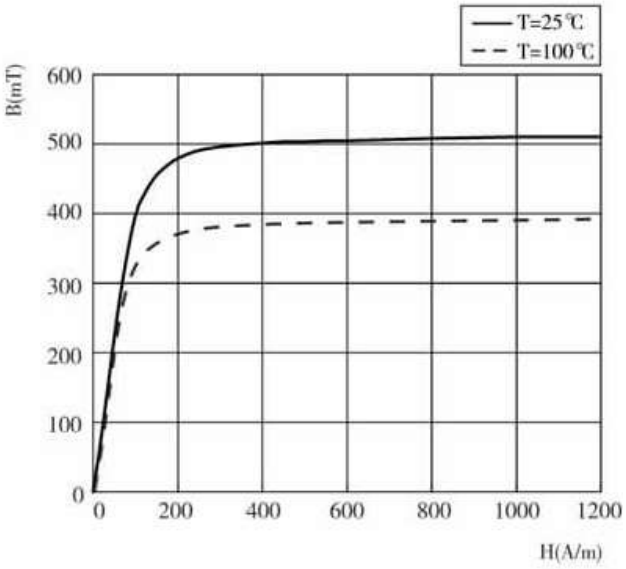

Fig.4 Magnetization Curves 磁化曲线

T44 material characteristics:

1 The power loss is lower with high saturation flux density.

2 optimized for frequencies up to 300 KHz.

3 The minimum power loss around 95℃.

Material Characteristics			Unit		T44
Initial Permeability					2400±25%
Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	510
			100℃	mT	390
Remanence Flux Density			25℃	mT	110
			100℃	mT	60
Effective Coercivity			25℃	A/m	13
			100℃	A/m	6.5
Curie Temperature			℃		≥215
Electrical Resistivity			Ω·m		6.5
Density			kg/m^3		$4.8x10^3$
Core Loss	25kHz 200mT Core loss	25℃	kW/m^3		105
		60℃			75
		100℃			50
	100kHz 200mT Core loss	25℃	kW/m^3		600
		60℃			450
		100℃			300
		120℃			380

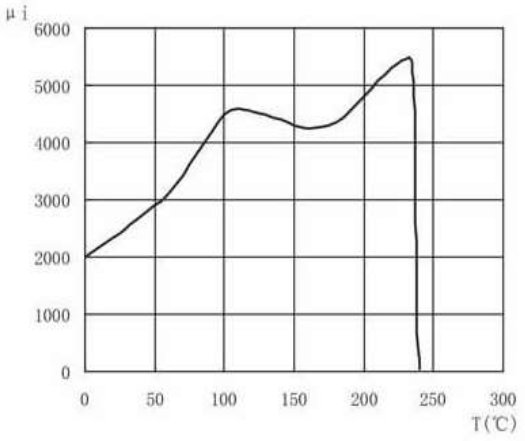

Fig.1 Permeability vs. Temperature 磁导率之温度特性

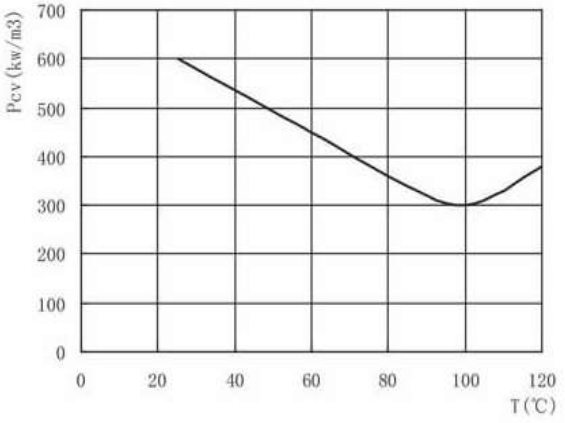

Fig.2 Power Loss(100kHz,200mT) vs. Temperature

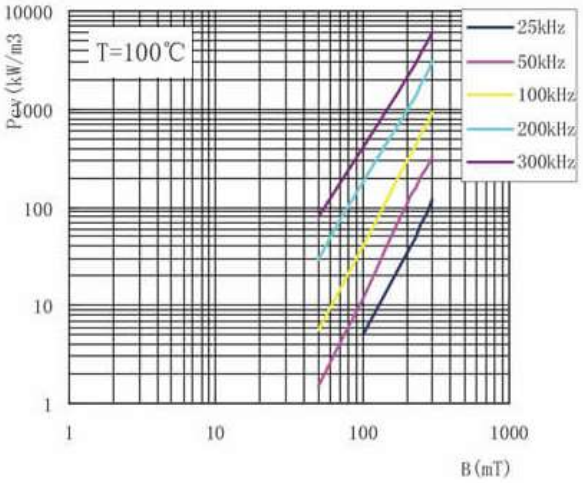

Fig.3Power Loss vs. Flux Density 功耗随磁通密度之变化

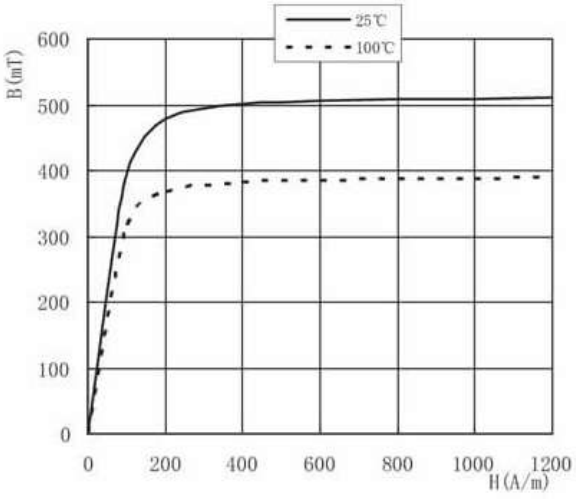

Fig.4 Magnetization Curves 磁化曲线

T47 material characteristics:

1 The power loss is lower than T44 material with higher saturation flux density.

2 optimized for frequencies up to 400 KHz.

3 The minimum power loss around 100℃.

Material Characteristics			Unit		T47
Initial Permeability					2500±25%
Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	530
			100℃	mT	420
Remanence Flux Density			25℃	mT	180
			100℃	mT	60
Effective Coercivity			25℃	A/m	13
			100℃	A/m	6
Curie Temperature			℃		≥230
Electrical Resistivity			Ω·m		4
Density			kg/m^3		4.9x103
Core Loss	25kHz 200mT Core loss	25℃	kW/m^3		105
		60℃			70
		100℃			45
	100kHz 200mT Core loss	25℃	kW/m^3		600
		60℃			400
		100℃			250
		120℃			360

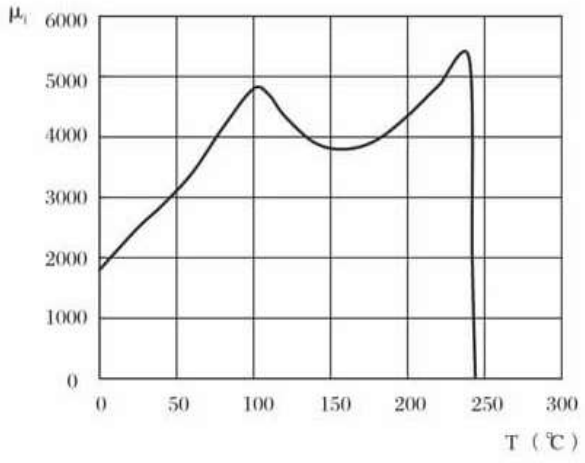

Fig.1 Permeability vs. Temperature 磁导率之温度特性

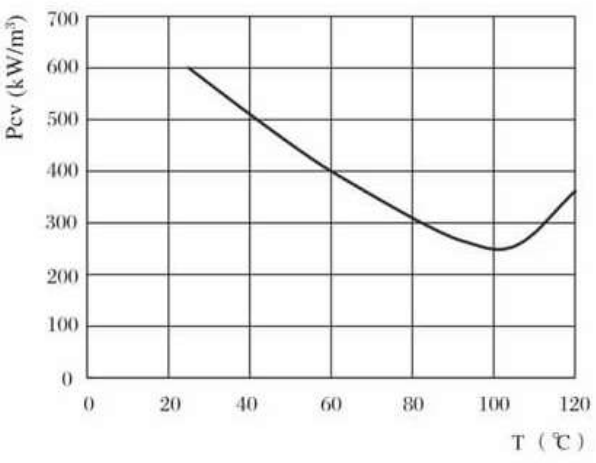

Fig.2 Power Loss(100kHz,200mT) vs. Temperature

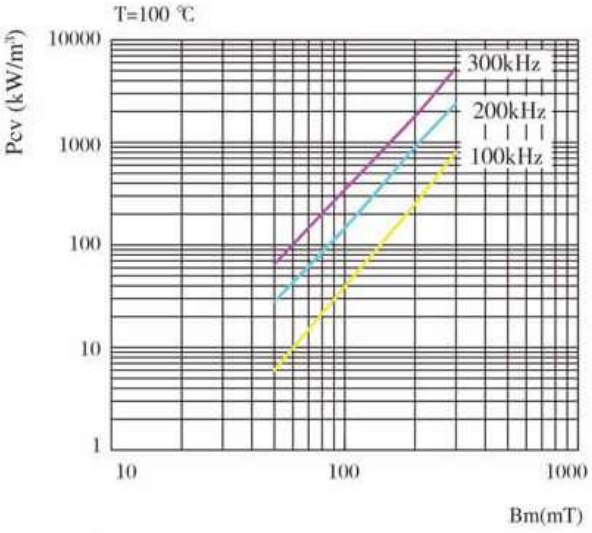

Fig.3Power Loss vs. Flux Density 功耗随磁通密度之变化

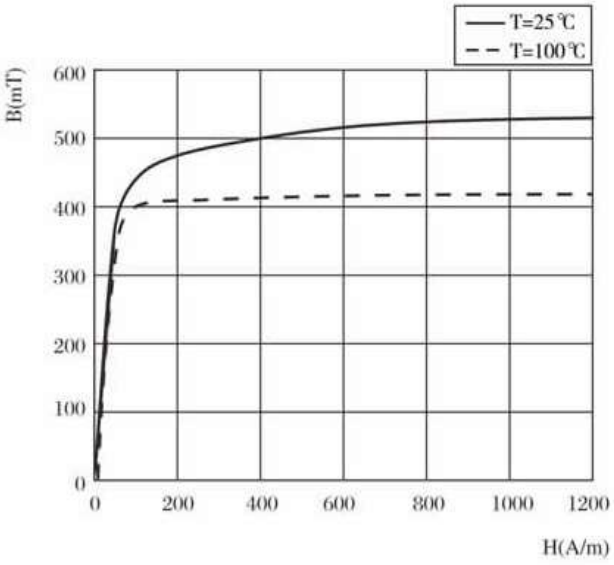

Fig.4 Magnetization Curves 磁化曲线

T95 material characteristics:

1 This power ferrite material has achieved low loss in a wide temperature from 25 to 120℃.

2 Higher initial permeability (around 3000) in power ferrite material with high saturation flux density.

Material Characteristics			Unit		T95
Initial Permeability					3300±25%
Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	530
			100℃	mT	410
Remanence Flux Density			25℃	mT	85
			100℃	mT	60
Effective Coercivity			25℃	A/m	9.5
			100℃	A/m	6.5
Curie Temperature			℃		≥220
Electrical Resistivity			Ω·m		6
Density			kg/m^3		$4.9x10^3$
Core Loss	25kHz 200mT Core loss	25℃	kW/m^3		70
		60℃			60
		100℃			50
	100kHz 200mT Core loss	25℃	kW/m^3		350
		80℃			280
		100℃			290
		120℃			350

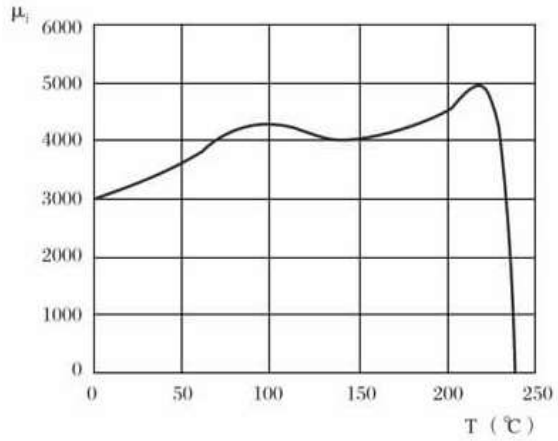

Fig.1 Permeability vs. Temperature 磁导率之温度特性

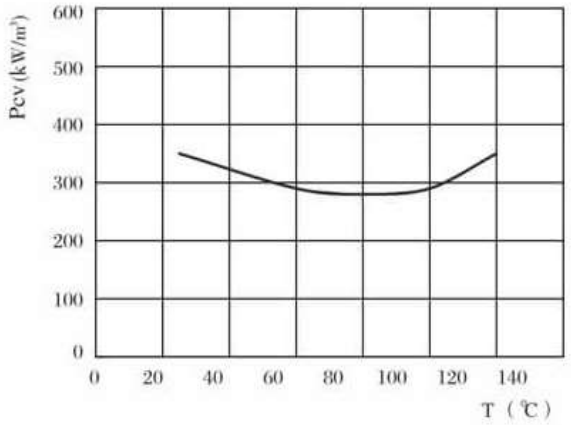

Fig.2 Power Loss(100kHz,200mT) vs. Temperature

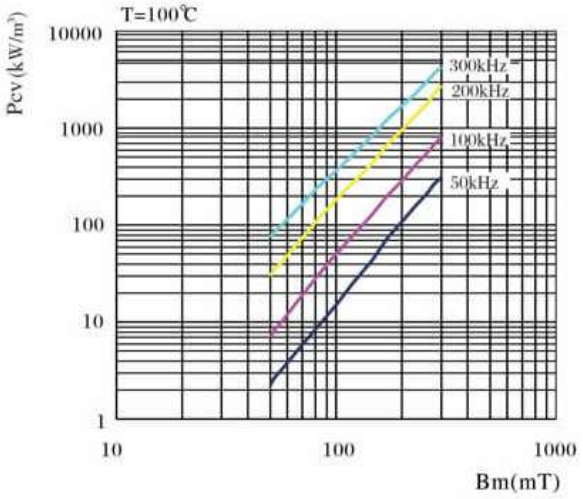

Fig.3Power Loss vs. Flux Density 功耗随磁通密度之变化

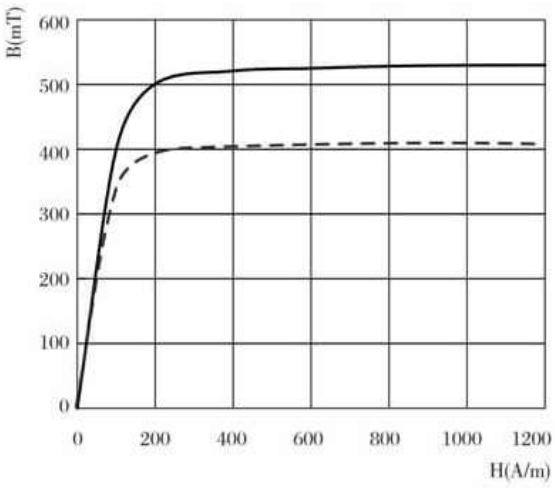

Fig.4 Magnetization Curves 磁化曲线

T96 material characteristics:

1 This power ferrite material has achieved low loss in a wide temperature from 25 to 120℃.

2 Higher initial permeability (around 3500) in power ferrite material with high saturation flux density.

Material Characteristics			Unit		T96
Initial Permeability					3500±25%
Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	530
			100℃	mT	410
Remanence Flux Density			25℃	mT	90
			100℃	mT	70
Effective Coercivity			25℃	A/m	9.5
			100℃	A/m	6.5
Curie Temperature			℃		≥220
Electrical Resistivity			Ω·m		6
Density			kg/m^3		$4.9x10^3$
Core loss	100kHz 200mT	25℃	kW/m^3		320
		80℃			260
		100℃			270
		120℃			350

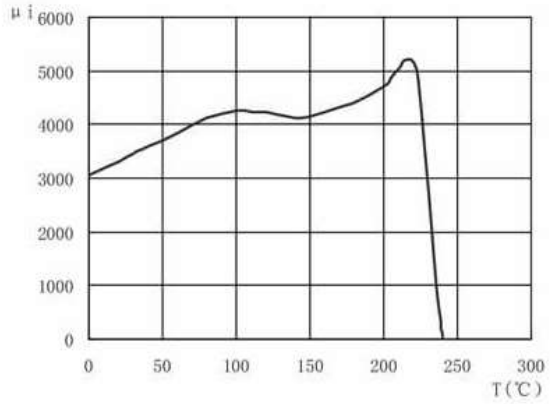

Fig.1 Permeability vs. Temperature 磁导率之温度特性

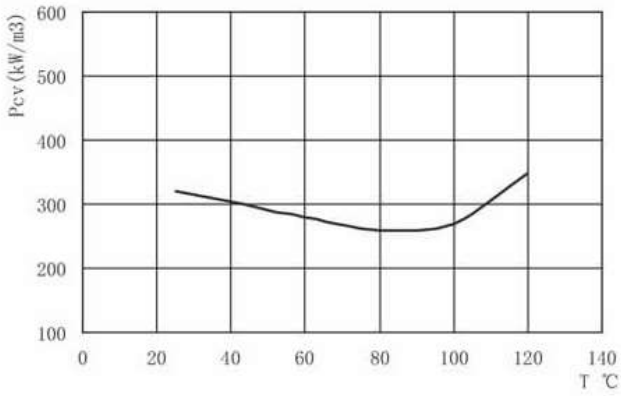

Fig.2 Power Loss(100kHz,200mT) vs. Temperature

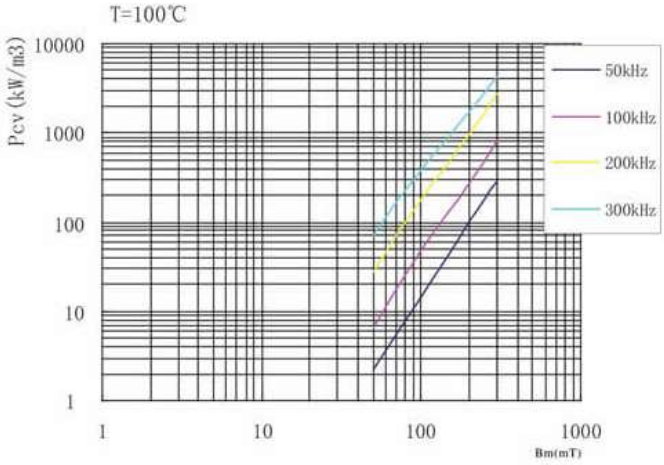

Fig.3 Power Loss vs. Flux Density 功耗随磁通密度之变化

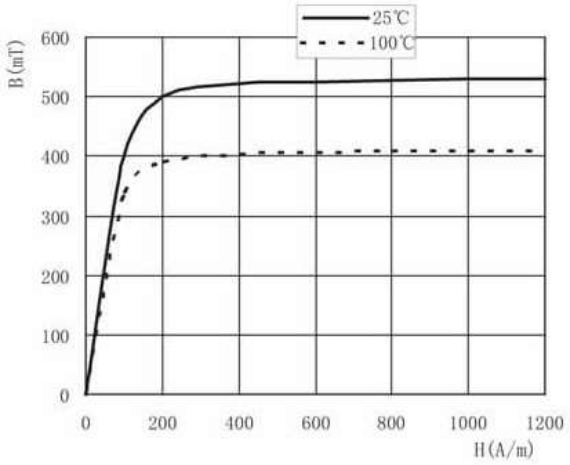

Fig.4 Magnetization Curves 磁化曲线

T97 material characteristics:

1 lower core loss in a wide temperature from 25 to 120℃.

2 optimized for frequencies up to 300 KHz.

3 lower core loss in a wide frequencies from100kHz to 300kHz.

Material Characteristics		Unit		T97
μ_i Initial Permeability				3400±25%
Bs Saturation Magnetic Flux Density @H=1194A/m		mT	25℃	530
		mT	100℃	420
Br Remanence Flux Density		25℃	mT	90
		100℃	mT	70
Hc Effective Coercivity		25℃	A/m	10
		100℃	A/m	8
Tc Curie Temperature		℃		≥215
d Density		kg/m^3		4.9x10^3
Core Loss	100kHz 200mT	kW/m^3	25℃	290
			60℃	270
			80℃	270
			100℃	280
			120℃	320
	300kHz 100mT	kW/m^3	25℃	300
			60℃	260
			80℃	260
			100℃	270
			120℃	300

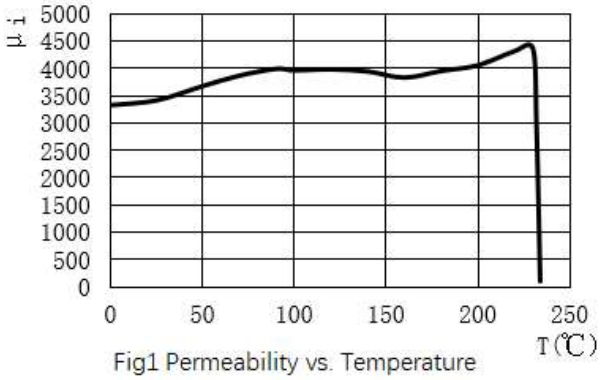

Fig1 Permeability vs. Temperature

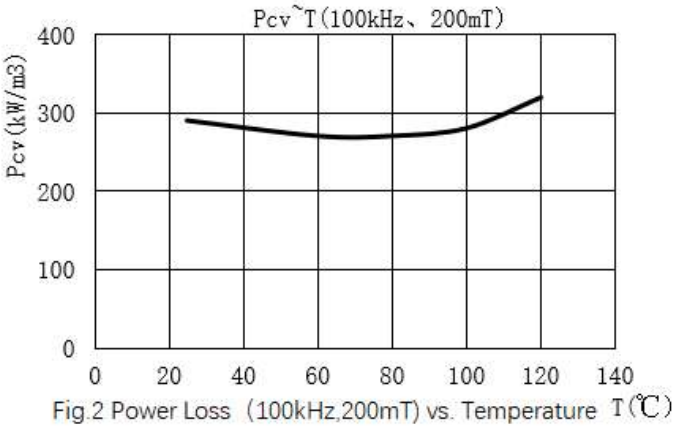

Fig.2 Power Loss (100kHz,200mT) vs. Temperature

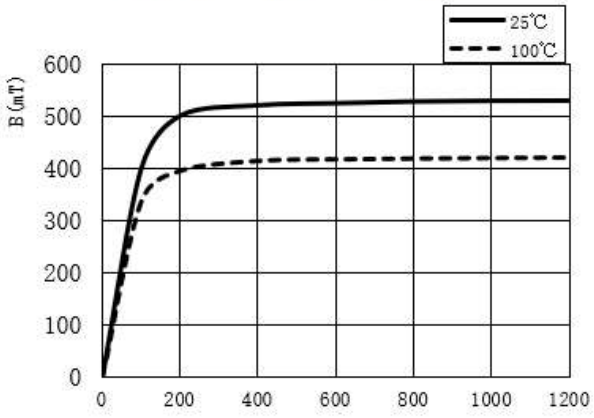

Fig.3 B vs. H

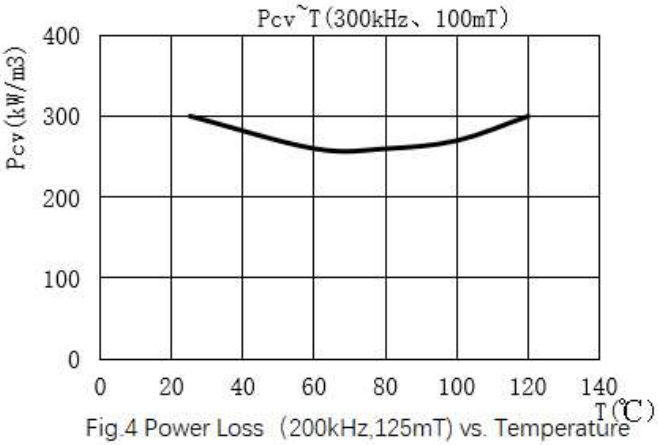

Fig.4 Power Loss (200kHz,125mT) vs. Temperature

TB44 material characteristics:

1 This power ferrite material has achieved high saturation flux density at high (100℃) temperature.

2 Lower Core loss, The minimum power loss around 95℃.

Material Characteristics			Unit		TB44
Initial Permeability					2200±25%
Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	540
			100℃	mT	450
Remanence Flux Density			25℃	mT	170
			100℃	mT	60
Effective Coercivity			25℃	A/m	13
			100℃	A/m	6.5
Curie Temperature			℃		≥240
Electrical Resistivity			Ω·m		6
Density			kg/m^3		4.9x103
Core Loss	25kHz 200mT	25℃	kW/m^3		140
		60℃			100
		100℃			65
	100kHz 200mT	25℃	kW/m^3		680
		60℃			500
		100℃			320
		120℃			460

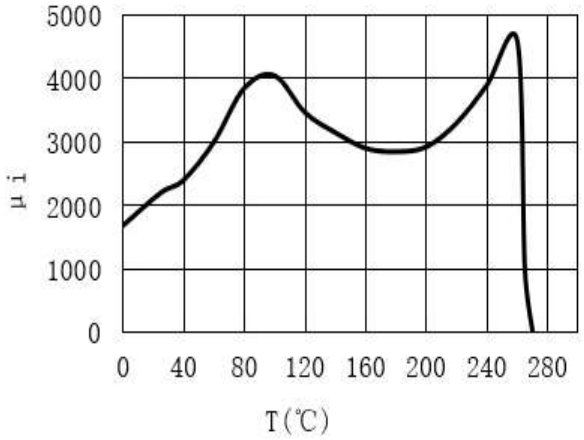

Fig1 Permeability vs. Temperature

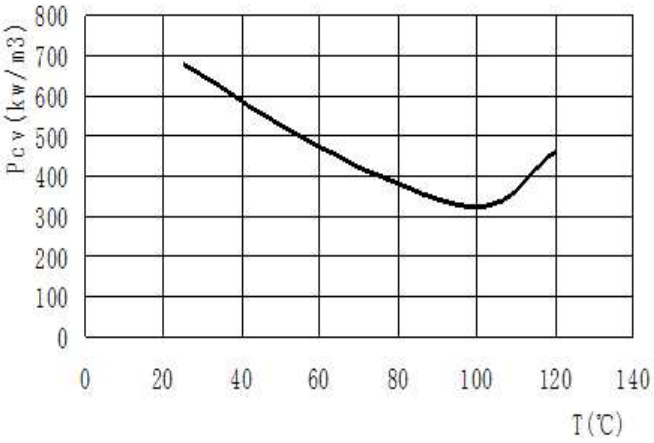

Fig.2 Power Loss(100kHz,200mT) vs. Temperature

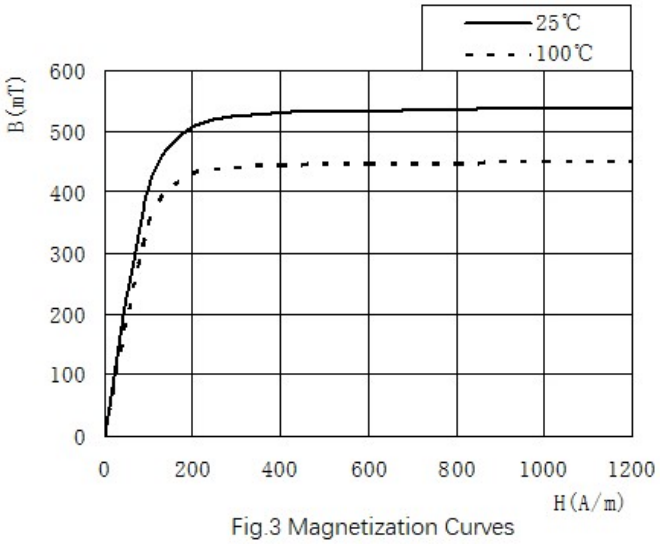

Fig.3 Magnetization Curves

TB95 material characteristics:

This power ferrite material has achieved low loss in a wide temperature from 25 to 120℃. and high saturation flux density at high (100℃) temperature.

Material Characteristics			Unit		TB95
μ_i Initial Permeability					3000±25%
Bs Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	540
			100℃	mT	450
Br Remanence Flux Density			25℃	mT	90
			100℃	mT	60
Hc Effective Coercivity			25℃	A/m	10
			100℃	A/m	6.5
Tc Curie Temperature			℃		≥240
ρ Electrical Resistivity			Ω・m		6
d Density			kg/m^3		$4.9x10^3$
Core Loss	100kHz 200mT	25℃	kW/m^3		360
		100℃			300
		120℃			360

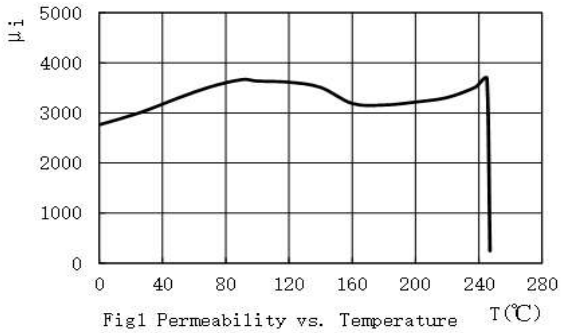

Fig1 Permeability vs. Temperature

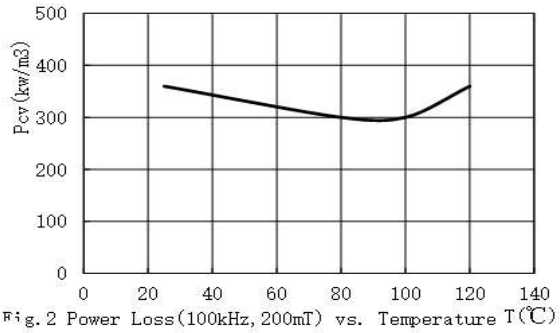

Fig.2 Power Loss(100kHz,200mT) vs. Temperature

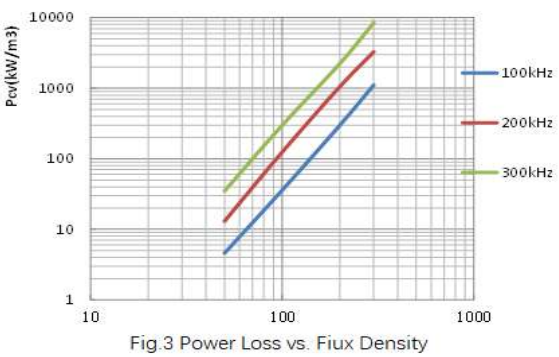

Fig.3 Power Loss vs. Fiux Density

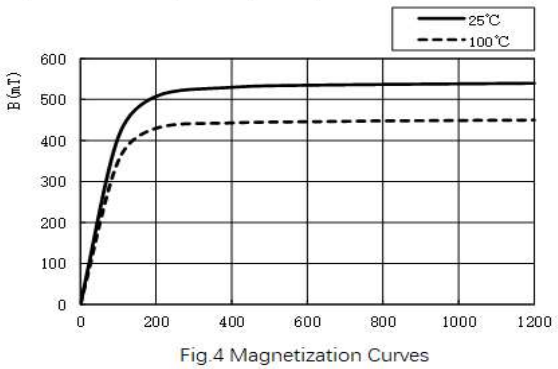

Fig.4 Magnetization Curves

TH50 material characteristics:

1 High frequency power material (300kHz to 500KHz)

2 low power loss at high frequency.

TH50 材料特性 TH50 Material Characteristics		
初始磁导率 μi initial permeability μi	1400±25%	
饱和磁通密度 Bs（mT） Saturation flux density 1194A/m	25℃	470
	100℃	380
剩磁 Br（mT） Residial flux density	25℃	140
	100℃	98
矫顽力 Hc（A/m） Coercivity	25℃	36.5
	100℃	27.2
500kHz,50mT 功率损耗 Pv mw/cm^3 Power Loss	25℃	130
	100℃	80
	120℃	110
居里温度 Tc（℃） Curie temp.	>240℃	
电阻率ρ（Ω·m） Resistivity	30.0	
密度 d(g/cm^3) Density	4.75	

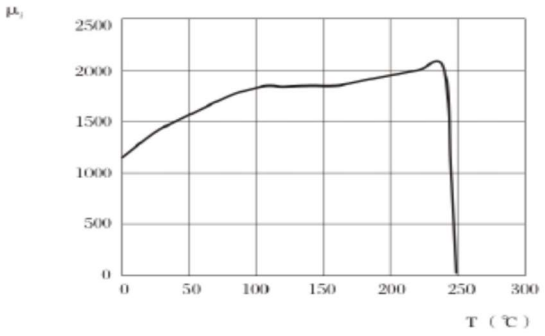

Fig.1 Permeability vs. Temperature 磁导率之温度特性

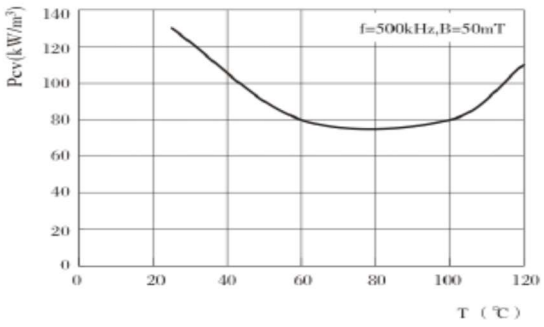

Fig.2 Power Loss(500kHz,50mT) vs. Temperature 功耗之温度曲线

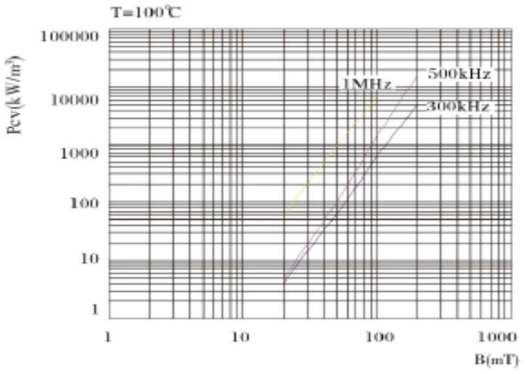

Fig.3 Power Loss Vs. Fiux Density 功耗随磁通密度之变化

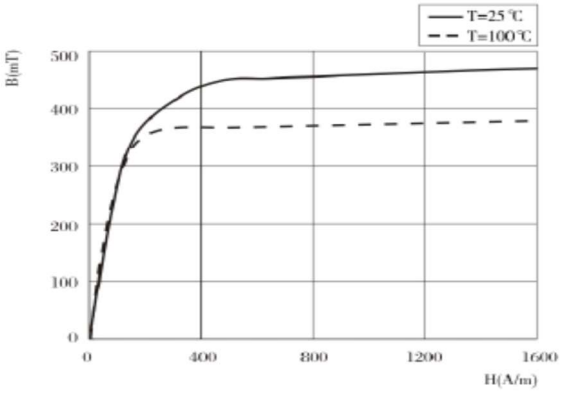

Fig.4 Magnetization Curves 磁化曲线

TH60 material characteristics:

1 High frequency power material (500kHz to 1MHz)

2 low power loss at high frequency.

Material Characteristics			Unit		TH60
μ_i Initial Permeability					1300±25%
Bs Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	470
			100℃	mT	380
Br Remanence Flux Density			25℃	mT	150
			100℃	mT	110
Hc Effective Coercivity			25℃	A/m	35
			100℃	A/m	26
Tc C urie Temperature			℃		≥240
ρ Electrical Resistivity			Ω·m		30
d Density			kg/m^3		$4.7x10^3$
Core Loss	500kHz 50mT	80℃	kW/m^3		80
		100℃			80
	1MHz、 30mT	80℃	kW/m^3		80
		100℃			80

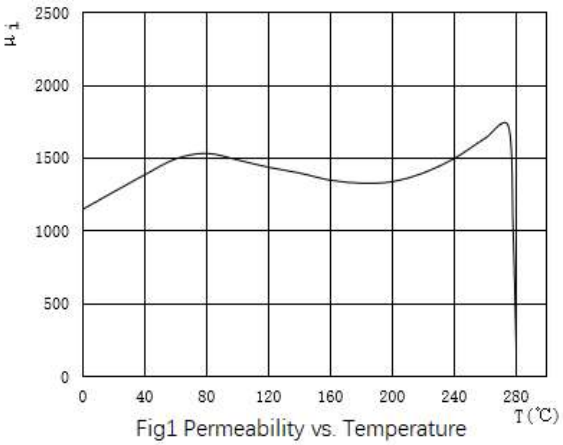

Fig1 Permeability vs. Temperature

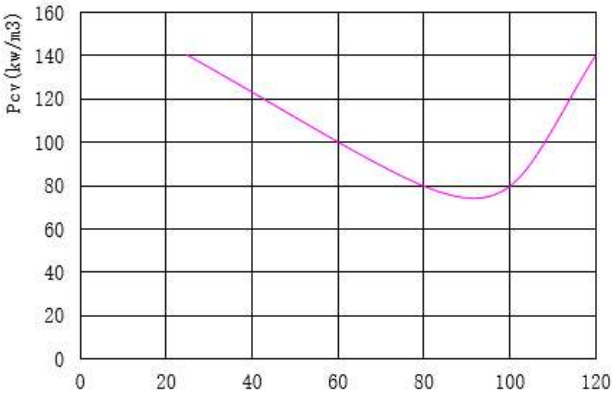

Fig.2 Power Loss (1MHz,30mT) vs. Temperature T(℃)

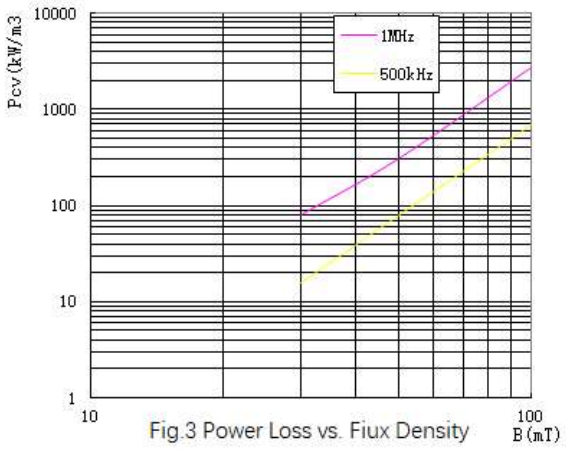

Fig.3 Power Loss vs. Fiux Density

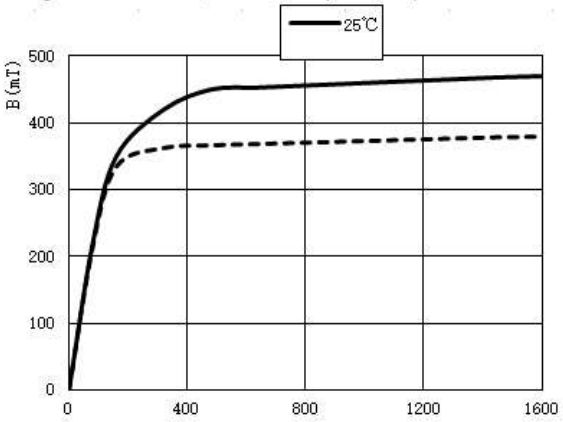

Fig.4 Magnetization Curves

TH95 material characteristics:

1 High frequency power material (500kHz to 1MHz)

2 low power loss at high frequency.

Material Characteristics			Unit		TH95
μ_i Initial Permeability					1700±25%
Bs Saturation Magnetic Flux Density @H=1194A/m			25℃	mT	470
			100℃	mT	380
Tc Curie Temperature			℃		≥240
Core Loss	f=500kHz,B=50mT	25℃	kW/m^3		95
		100℃			80
		120℃			95

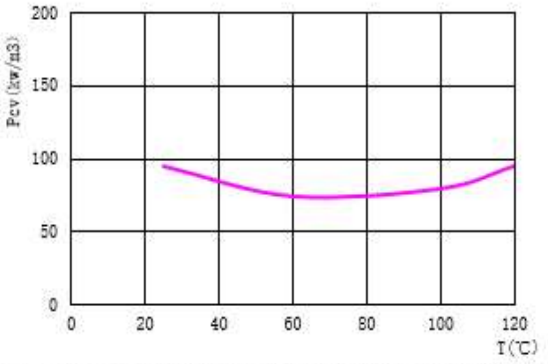

Fig.1 Power Loss vs. Temperature 功耗的温度曲线(f=500kHz,B=50mT)

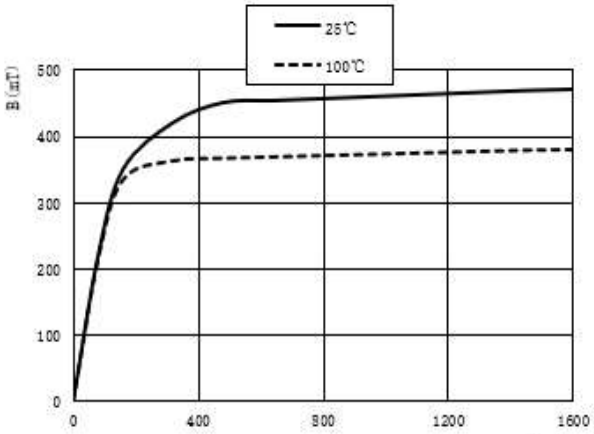

Fig.2 Magnetization Curves