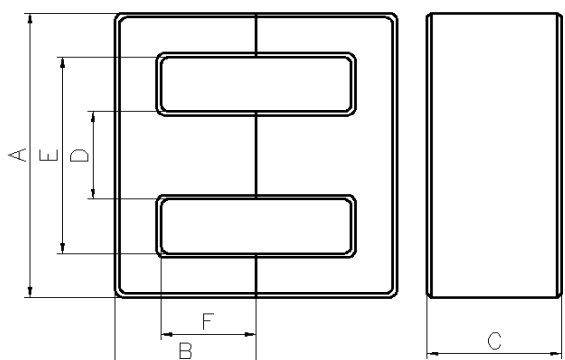


Ferrite Core Specification

Technology Dept.

NCD P/N	LP10 EE140/86/35	Customer		Spec No.			
Cus. part		Customer's P/N		Rev.No.	00	Page	1/1
				Dimensions (mm)			
				A	140.0±2.5		
				B	86.5+0.75/-0.5		
				C	35.0±0.7		
				D	35.0±0.7		
				E	105Ref		
				F	69.0±0.5		
Parameter	I _e =401mm		A _e =1225 mm ²	V _e = 491200 mm ³	m≈2450 g/prs		
Electric Charateristics	Item	Unit	Spec.	Test Condition		Instrument	
	A _L	nH/N ²	9500±25%	10kHz,0.1V,φ0.35,10Ts,23±2℃		HP4284A or eq.	
	Pc	W	12.2max	25kHz,100mT,25℃		SY-8216 or eq.	
	Pc	W	8.8max	25kHz,100mT,100℃		SY-8216 or eq.	
Appearance	Item		Content				
	Clean		Appearance must be clean.No powder accretes and watermark				
	Burr		Any blighting burr was not allow existed.				
	Crack		No crack and scar affect using				
	Chips		United surface: dia.≤5.0mm ² ,3part max.No united surface: dia≤15.0mm ² , 3parts max				
	Pull-out		Pull-out area≤ 1/10				
	Crystal Grain		Dia.3.0mm max ,less than 5 parts;Dia.5.0mm max ,less than 4 parts				
	Distortion		Product distortion≤1.5mm				
Marking	(No Marking)						
Packing		Material	Quantity	Unit	Marks		Label
	Inner	UU140 Styrofoam	1	Prs			
	Outer	N400*300*300	10	Prs			
Test Rule	According to GB2828. Once natural project for sampling.(II)Dimensions:AQL=1.0Capability:AQL=0.65						
Customer Affirm	Customer Affirm				Design	Check	Appr.
					Date	2023-12-14	



MAANSHAN NEW CONDA MAGNETIC INDUSTRIAL CO.,LTD.



材料特性 MATERIAL CHARACTERISTICS

● 宽温低损耗铁氧体材料LP10 Wide T-range Low Loss ferrite material LP10

特性 Characteristics	符号 Symbol	单位 Unit	条件 Condition	LP10
起始磁导率 Initial permeability	μ_i		25℃ 10kHz	3300±25%
相对损耗因数 Relative loss factor	$\tan\delta/\mu_i$		25℃ 100kHz	$<4\times 10^{-6}$
饱和磁通密度* (1194A/m) Saturation flux density*	Bs	mT	25℃	540
			100℃	430
剩磁* Remanence*	Br	mT	25℃	80
矫顽力* Coercivity*	Hc	A/m	25℃	9
功率损耗* Power loss* (f=100kHz, B=200mT)	Pcv	kW/m ³	25℃	300
			60℃	285
			80℃	275
			100℃	280
			120℃	320
			140℃	360
居里温度 Curie temperature	Tc	℃		≥230
电阻率* Resistivity*	ρ	$\Omega\cdot m$		6
密度* Density*	d	kg/m ³		4.9×10^3

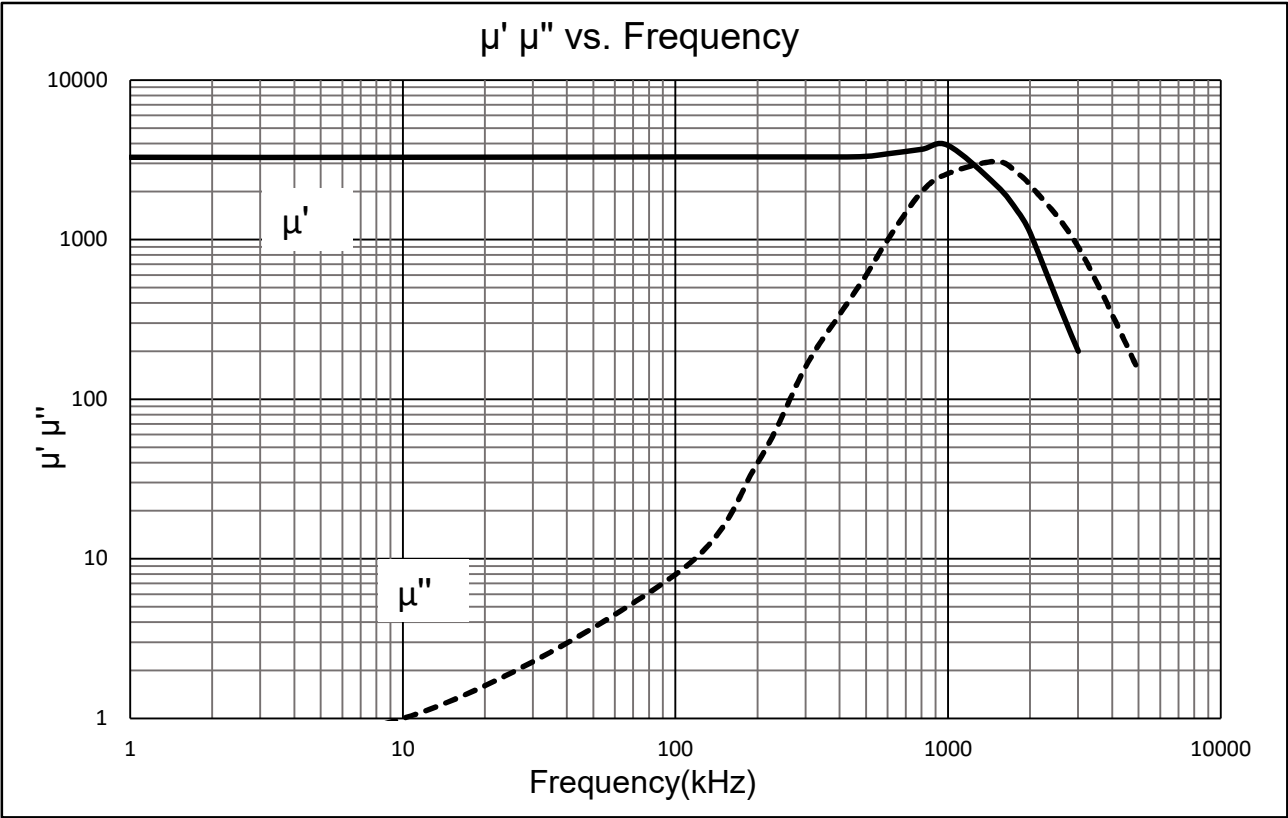
注： 1、如无说明，各项数值均在室温下用Φ25×Φ15×10环型磁心测得。

2、*为典型值。

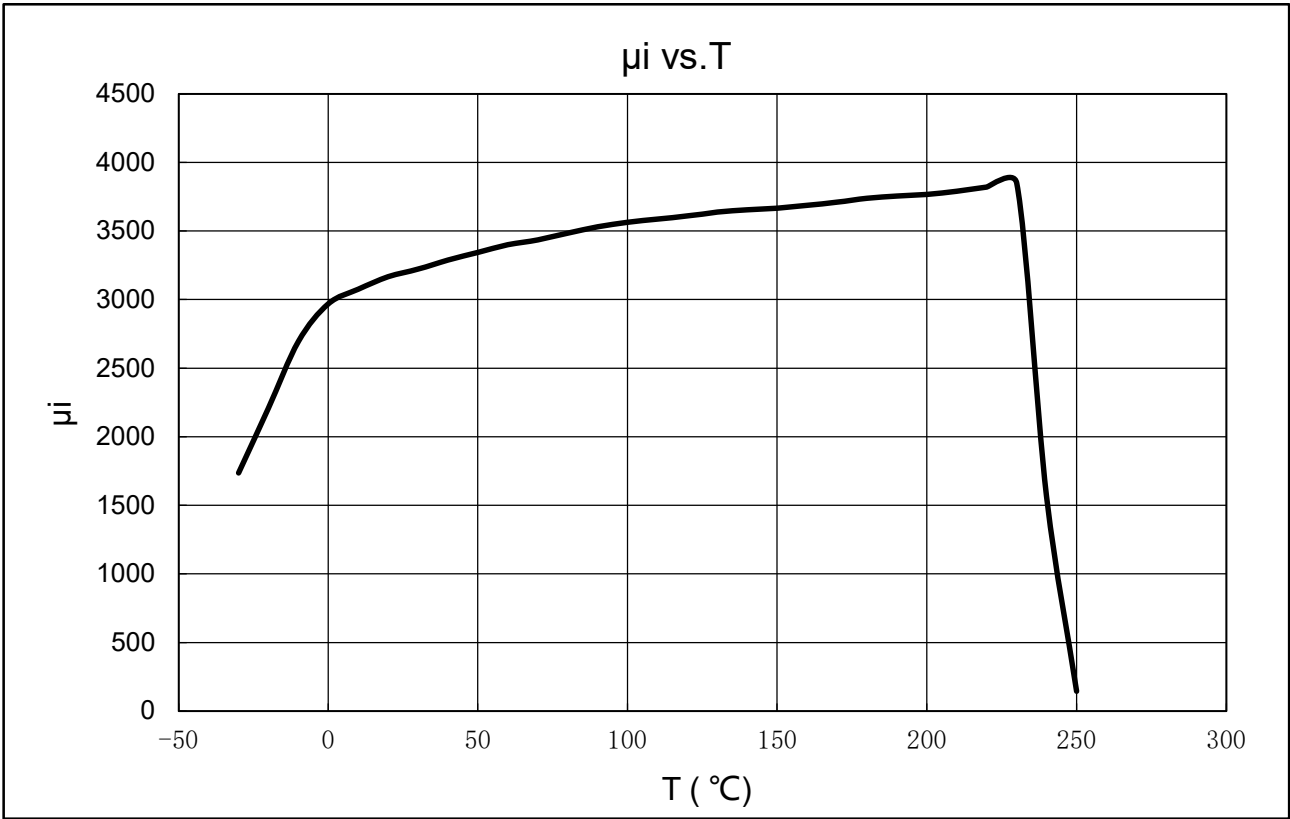
Note: 1.The values were obtained with toroidal core Φ25×Φ15×10 at room temperature unless otherwise specified.

2. * Typical value.

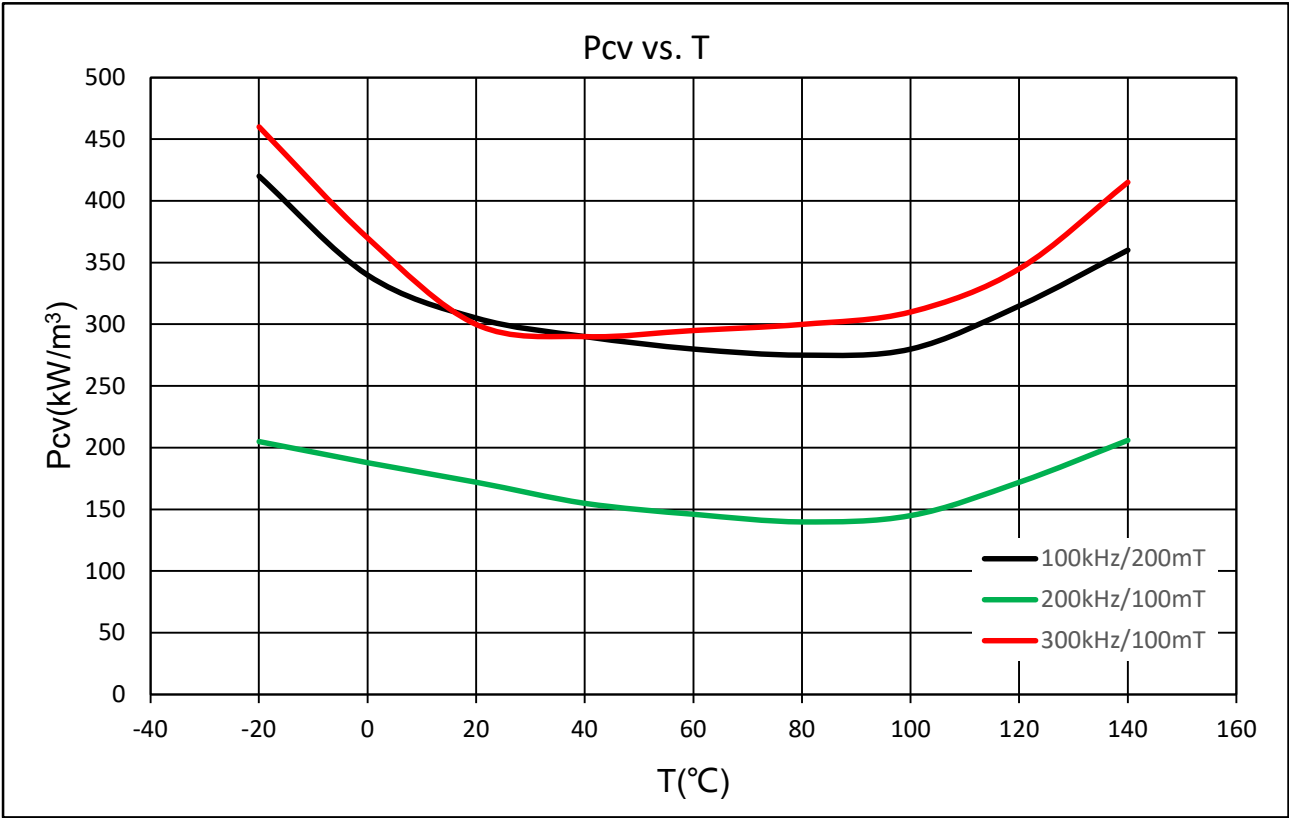
复数磁导率与频率关系
Complex Permeability μ' μ'' vs. Frequency F



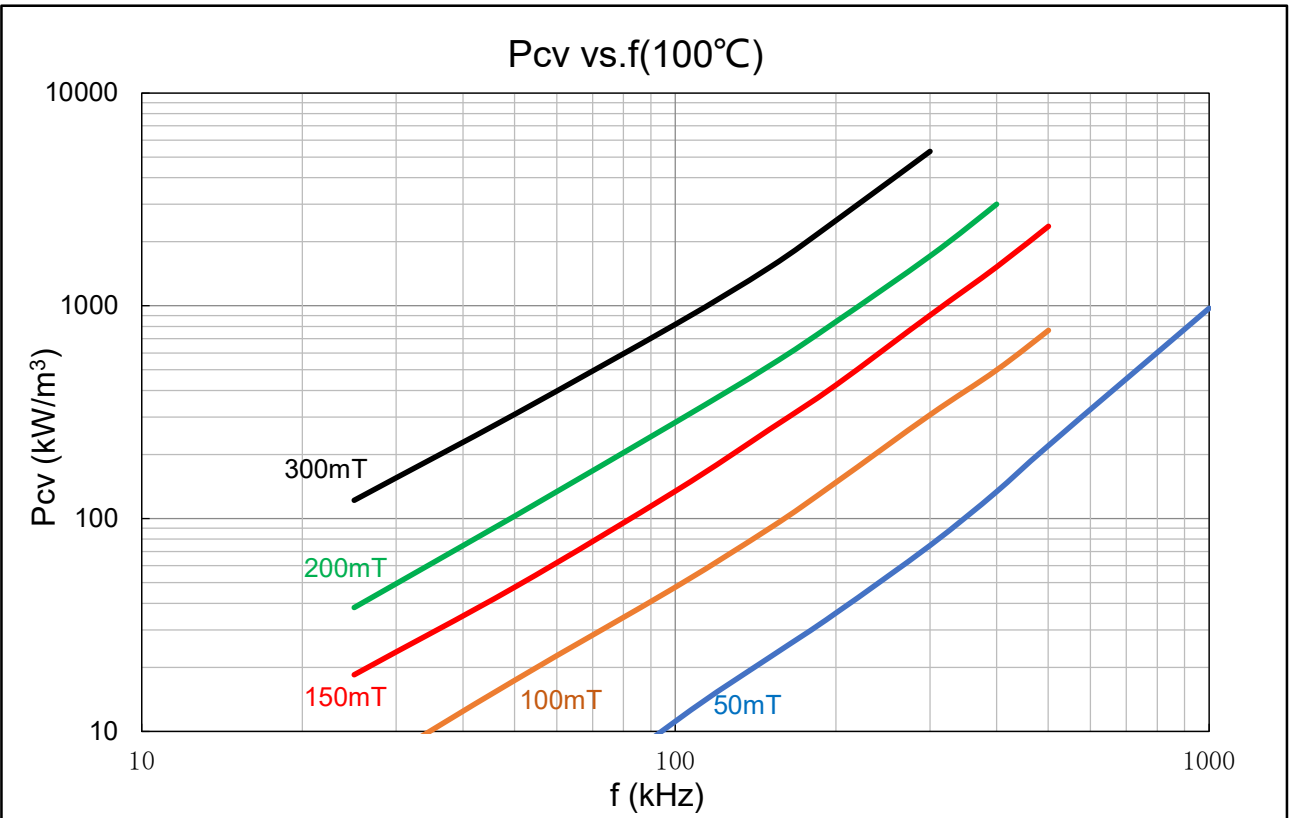
初始磁导率与温度关系
Permeability μ_i vs. Temperature T



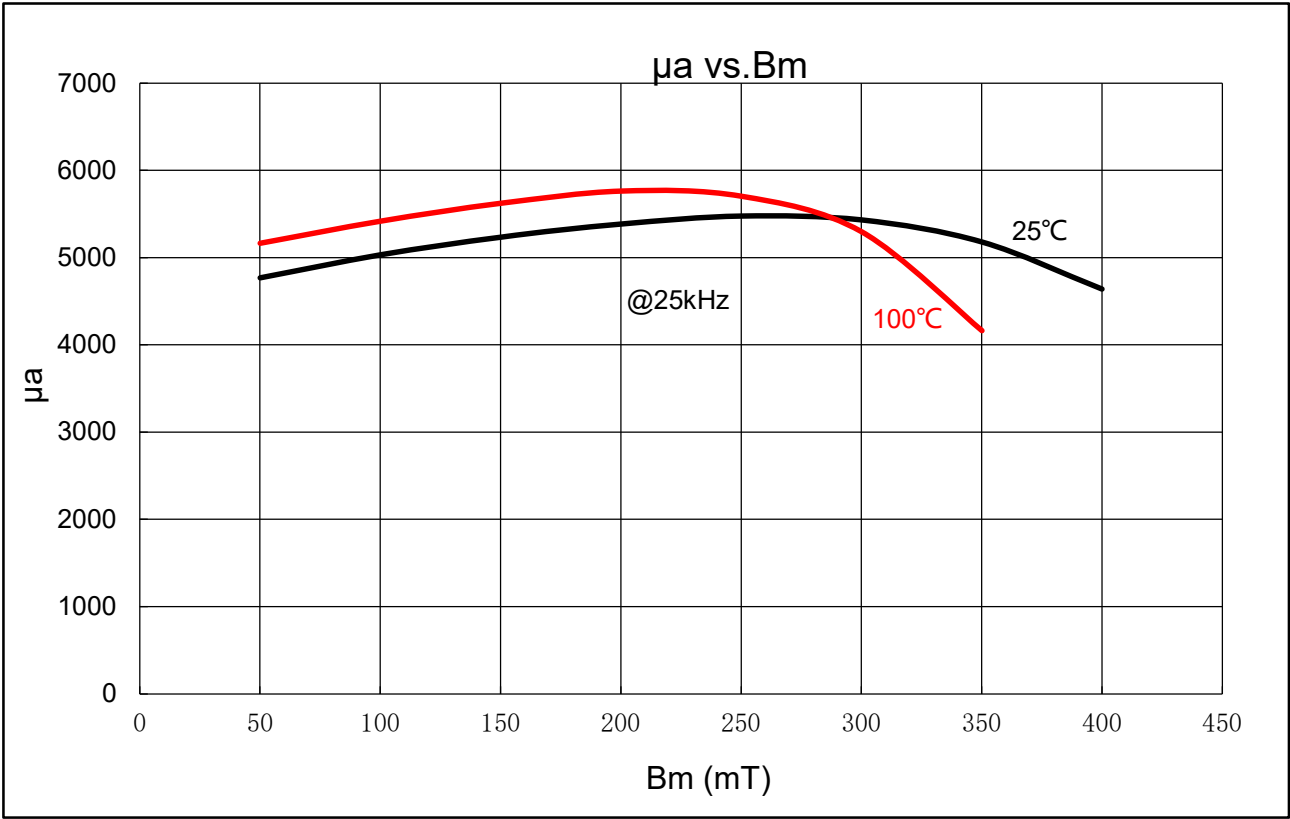
功率损耗与温度关系
Powerloss Pc vs.Temperature



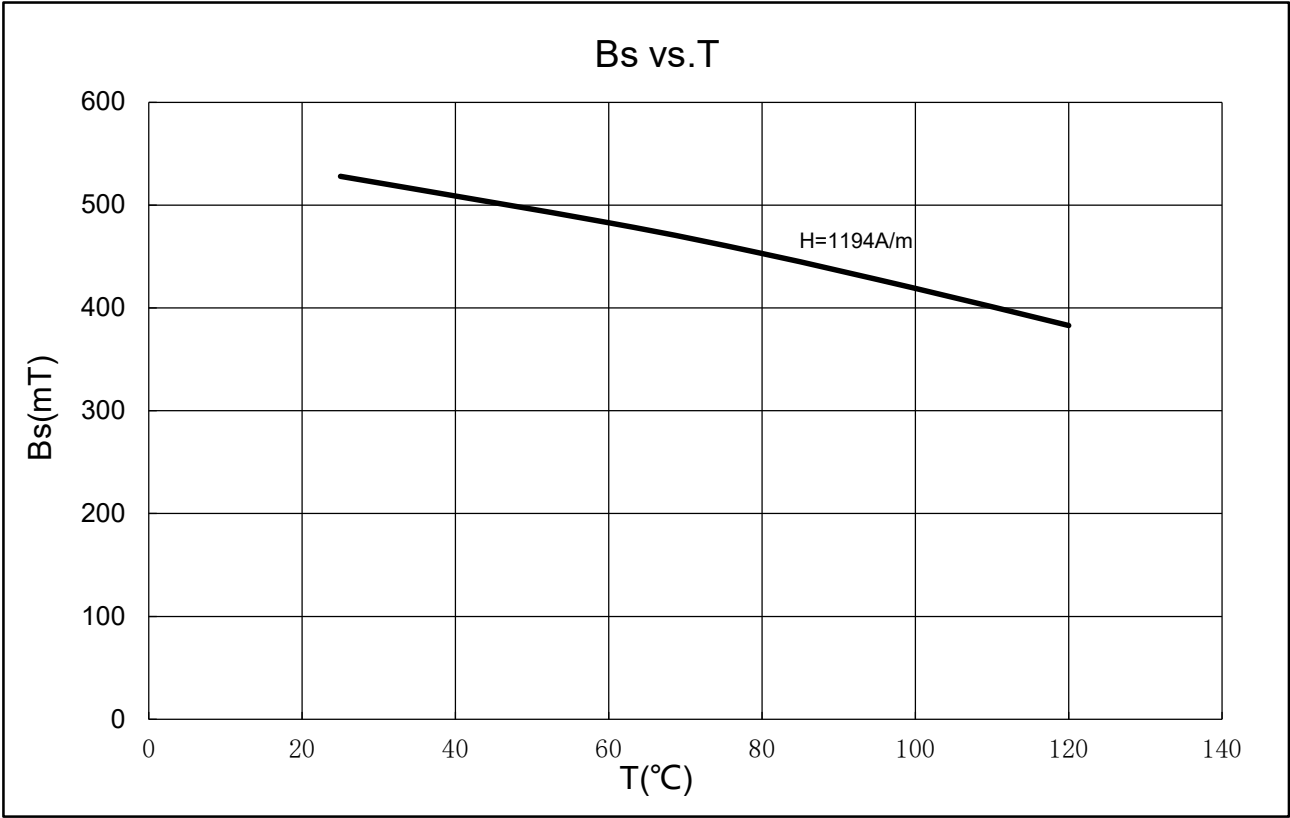
功率损耗与频率关系
Powerloss Pc vs.frequency f



振幅磁导率与磁通密度关系
Amplitude permeability μ_a vs.flux density B_m



饱和磁通密度与温度关系
Saturation flux density B_s vs.temperature T



磁通密度与磁场强度关系
Fulx density B vs.magnetic field H

