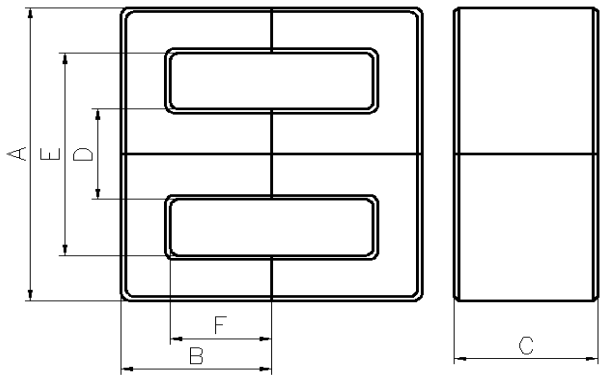
Ferrite Core Specification

Technology Dept.

NCD P/N	LP9 EE160/83/40	Customer		Spec No.			
Cus. part		Customer´s P/N		Rev.No.	00	Page	1/1



Dimensions (mm)	
A	162.0±2.5
B	82.8+1.0/-0
C	40.0±1.5
D	38.0+2.0/-1.0
E	120.0min
F	64.0±1.0

Parameter	l_e= 398 mm	A_e= 1600mm²	V_e= 637000 mm³	m≈3200 g/prs

Electric Charateristics	Item	Unit	Spec.	Test Condition	Instrument
	A_L	nH/N^2	10800±25%	10kHz,0.1V,¢0.35,10Ts,23±2℃	HP4284A or eq.
	Pc(U80/85/40)	W	10.4max	25kHz,100mT,25℃	SY8216 or eq.
	Pc(U80/85/40)	W	7.0max	25kHz,100mT,100℃	SY8216 or eq.
	The Pc test is conducted using UU80/85/40 ferrite cores before adhesive bonding.				

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.≤8.0mm^2,3part max.No united surface: dia≤14.0mm^2, 2parts 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≤1.7mm

Marking	(No Marking)

Packing		Material	Quantity	Unit	Marks	Label
	Inner	EI160 Styrofoam	1	Prs		
	Outer	N400*300*250	8	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	2023-12-15	

MAANSHAN NEW CONDA MAGNETIC INDUSTRIAL CO.,LTD.

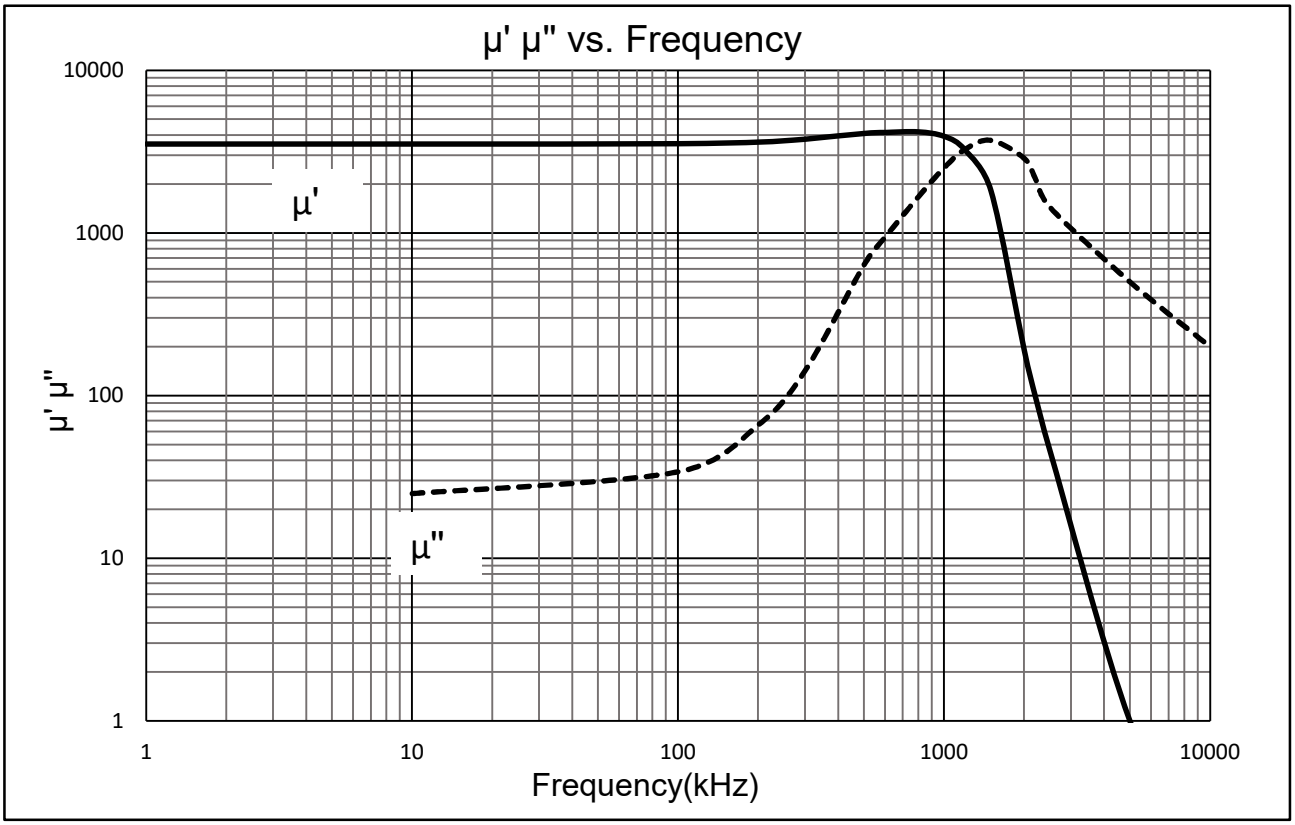
● LP9宽温低损耗铁氧体材料 Wide T-range Low Loss ferrite material LP9

特性 Characteristics	符号 Symbol	单位 Unit	条件 Condition	LP9
起始磁导率 Initial permeability	μi		25℃	3300±25%
相对损耗因数 Relative loss factor	tanδ/μi		100kHz	＜4×10^{-6}
饱和磁通密度*（1194A/m） Saturation flux density*	Bs	mT	25℃	520
			100℃	410
剩磁* Remanence*	Br	mT	25℃	90
矫顽力* Coercivity*	Hc	A/m	25℃	9
功率损耗* Power loss* (f=100kHz,B=200mT)	Pcv	kW/m^3	25℃	350
			80℃	300
			100℃	310
			120℃	350
			140℃	400
居里温度 Curie temperature	Tc	℃		≥215
电阻率* Resistivity*	ρ	Ω·m		6
密度* Density*	d	kg/m^3		4.9×10^3

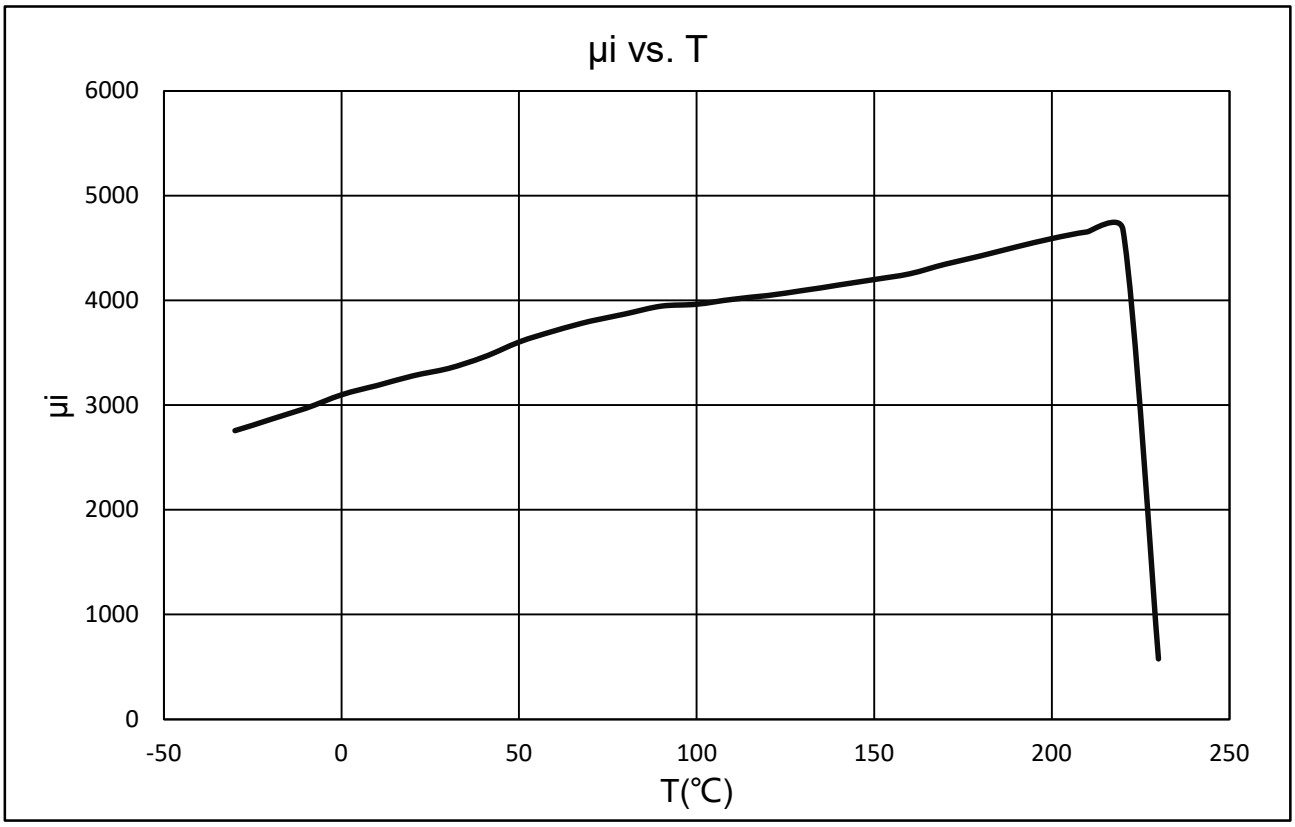
注： 1、如无说明，各项数值均在室温下用Φ25×Φ15×10环型磁心测得。
2、*为典型值。

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

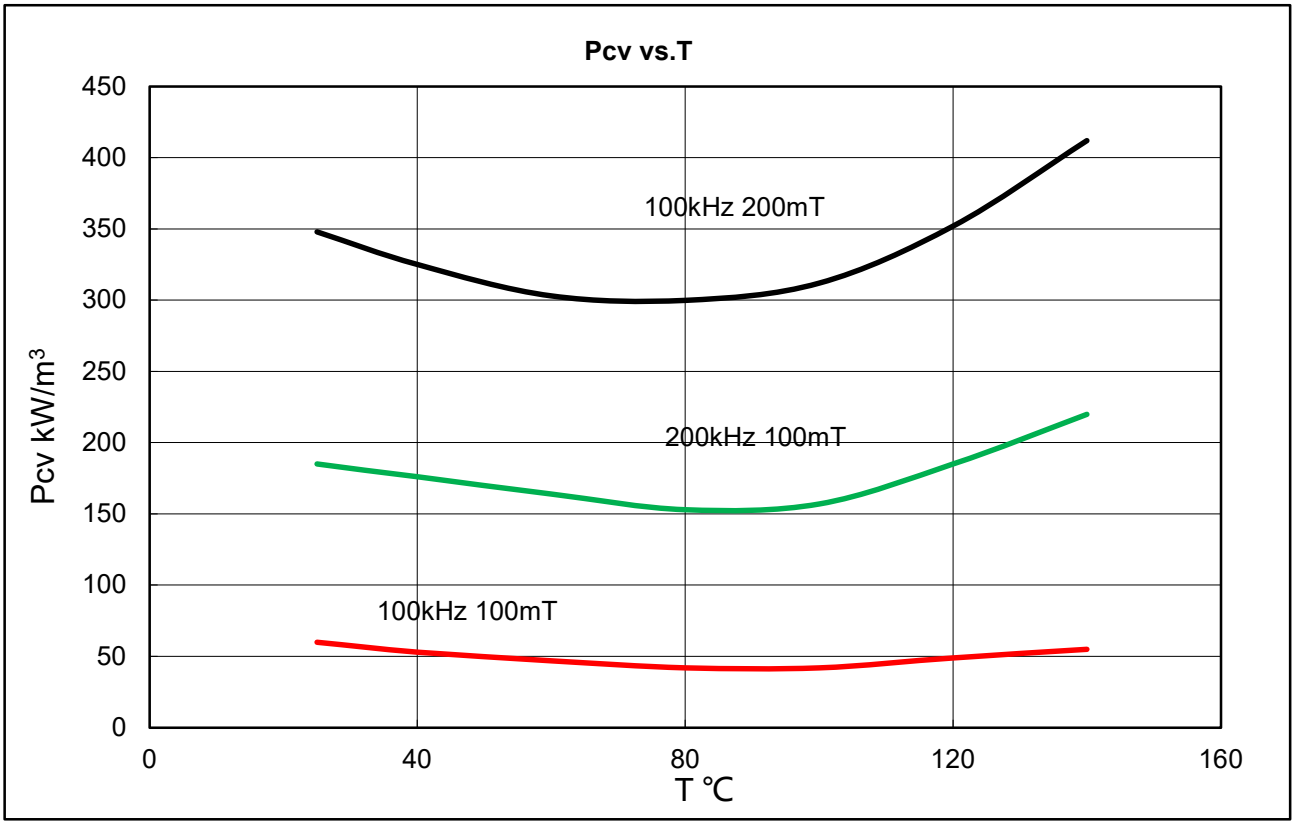
复数磁导率与频率关系
Complex Permeability μ' μ" vs. Frequency F



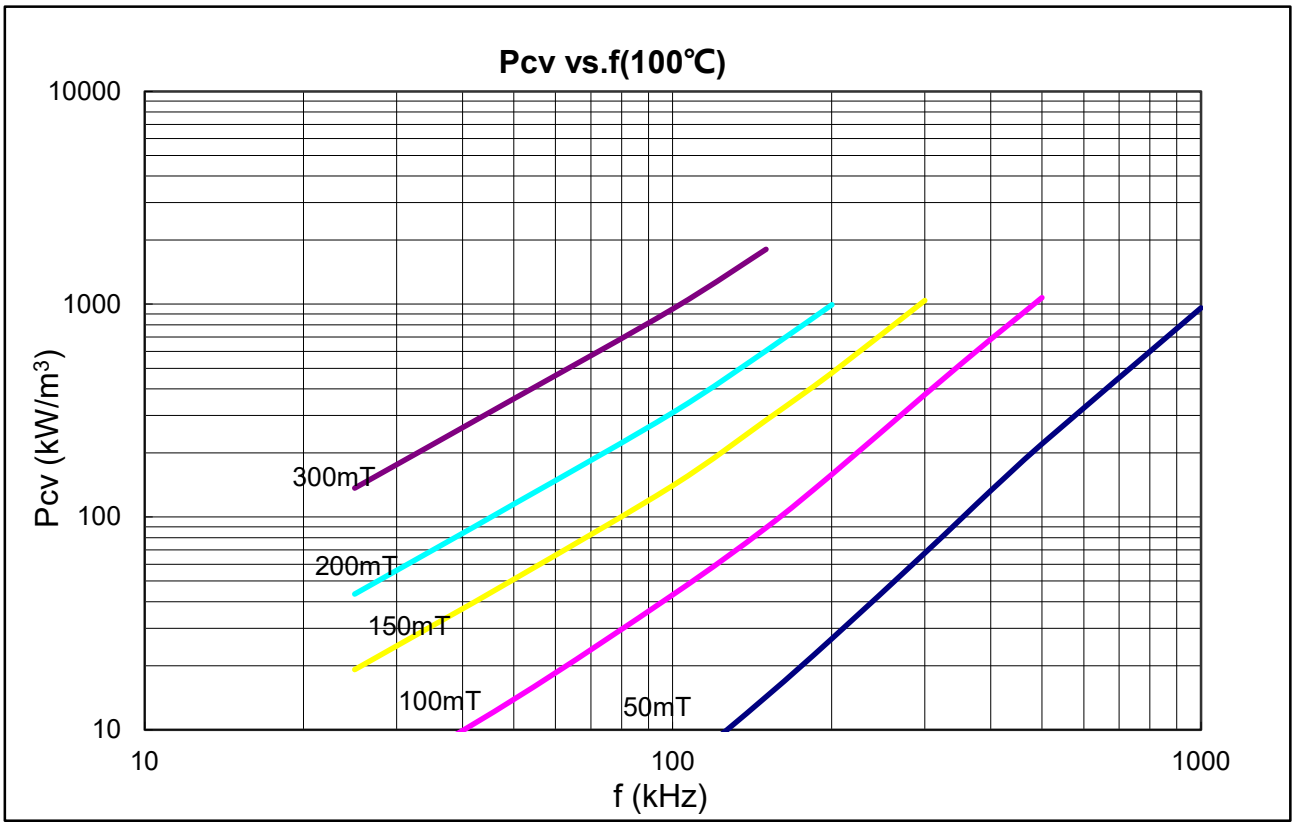
初始磁导率与温度关系
Permeability μi vs. Temperature T



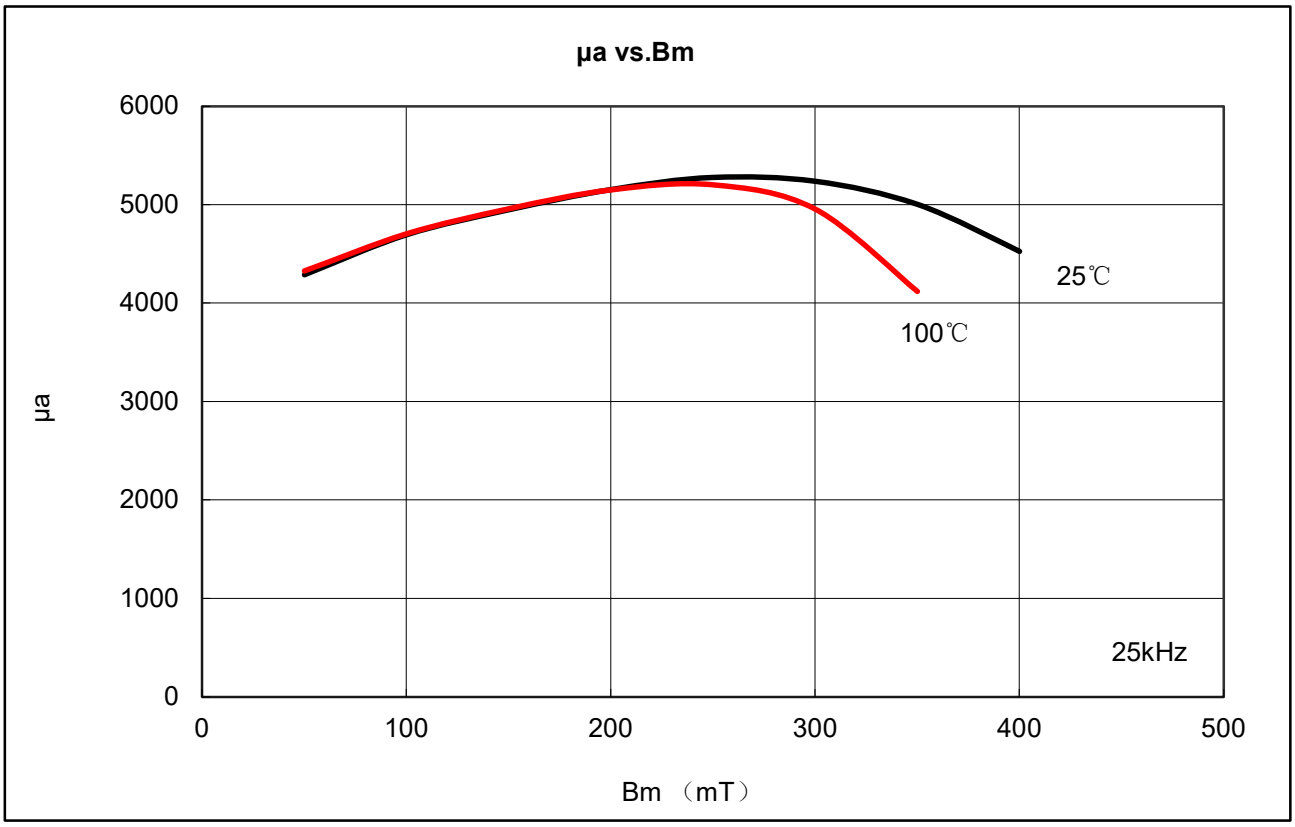
功率损耗与温度关系
Powerloss Pc vs.Temperature



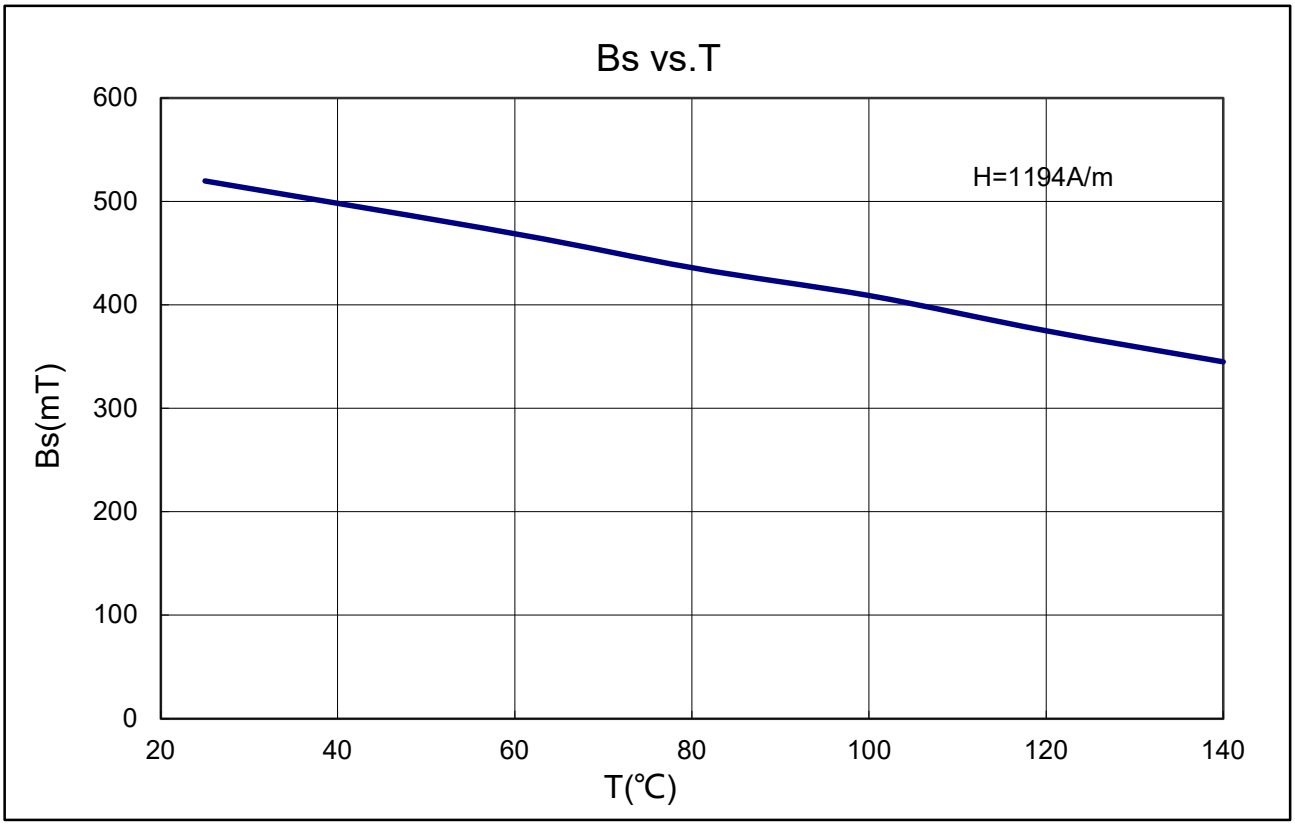
功率损耗与频率关系
Powerloss Pc vs.frequency f



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



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



磁通密度与磁场强度关系

Fulx density B vs.magnetic field H