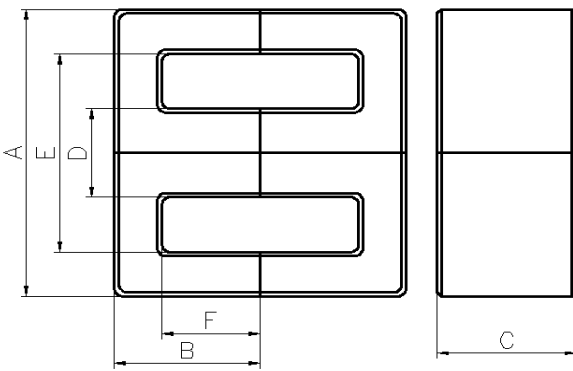


Ferrite Core Specification

Technology Dept.

NCD P/N	LP3 EE220/95/80	Customer		Spec No.			
Cus. part		Customer's P/N		Rev.No.	00	Page	1/1
				Dimensions (mm)			
				A	218.0±2.0		
				B	94.0±1.0		
				C	79.0±2.0		
				D	58.0±2.0		
				E	153min		
				F	65.0±1.0		
Notes	Made with 4 pcs of UU110/95/40 adhesive						
Parameter	Le= 456.7 mm		Ae=4778 mm ²	Ve= 2182110 mm ³	m≈10700 g/prs		
Electric Charateristics	Item	Unit	Spec.	Test Condition		Instrument	
	A _L	nH/N ²	17000min	10kHz,0.1V,φ0.35,10Ts,23±2℃		HP4284A or eq.	
	Before using adhesive for Pc testing, UU110/95/40 was tested (Le=466, Ae=1456, Ve=679630; 25KHz, 100mT, PC < 13.6W)						
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.≤6.0mm ² ,1part 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.6.0mm max ,less than 3 parts				
	Distortion		Product distortion≤2.5mm				
Marking	(No Marking)						
Packing		Material	Quantity	Unit	Marks		Label
	Inner	E122 Styrofoam	1	Prs			
	Outer	N400*300*250	4	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	2023-12-18	



MAANSHAN NEW CONDA MAGNETIC INDUSTRIAL CO.,LTD.

材料特性 MATERIAL CHARACTERISTICS

● LP3型功率铁氧体材料 Power ferrite material LP3

特性	符号	单位	条件	LP3
Characteristics	Symbol	Unit	Condition	
起始磁导率 Initial permeability	μ_i			2300±25%
相对损耗因数 Relative loss factor	$\tan\delta/\mu_i$	$\times 10^{-6}$	100kHz	<4
饱和磁通密度*(1194A/m) Saturation flux density*	Bs	mT	25℃	500
			100℃	390
剩磁* Remanence*	Br	mT		130
矫顽力* Coercivity*	Hc	A/m		13
功率损耗* Power loss* (f=100kHz,B=100mT)	Pcv	kW/m ³	25℃	
			80℃	90
			100℃	70
功率损耗* Power loss* (f=100kHz,B=200mT)	Pcv	kW/m ³	25℃	650
			60℃	
			80℃	450
			100℃	410
			120℃	
居里温度 Curie temperature	Tc	℃		≥215
电阻率* Resistivity*	ρ	$\Omega \cdot m$		5
密度* Density*	d	kg/m ³ ×10 ³		4.8

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,*¹测试条件为（f=400kHz,B=50mT），*²测试条件为（f=500kHz,B=50mT）。

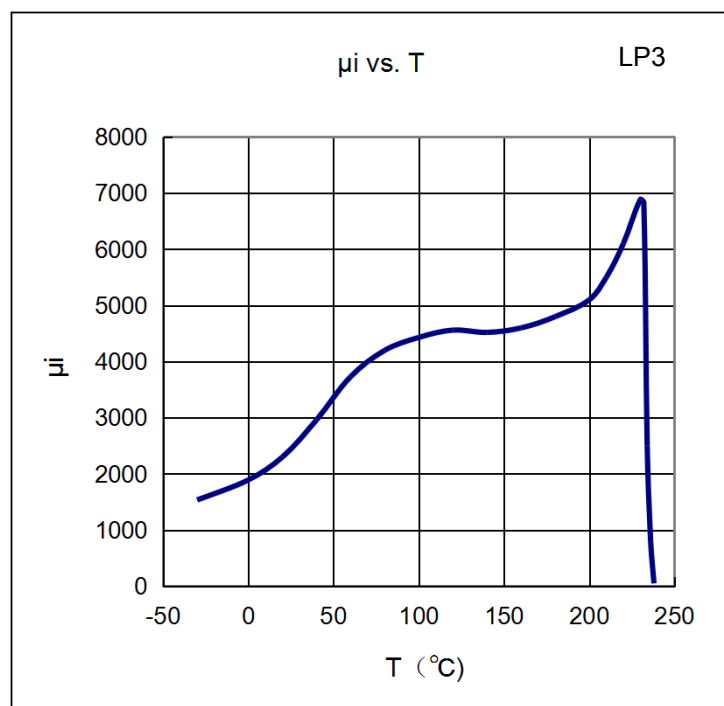
Note: 1.The values were obtained with toroidal core Φ25×Φ15×10 at room temperature unless otherwise specified.

2. * Typical value,*¹Test condition (f=400kHz,B=50mT),*²Test condition (f=500kHz,B=50mT)。

● LP3型功率铁氧体材料 Power ferrite material LP3

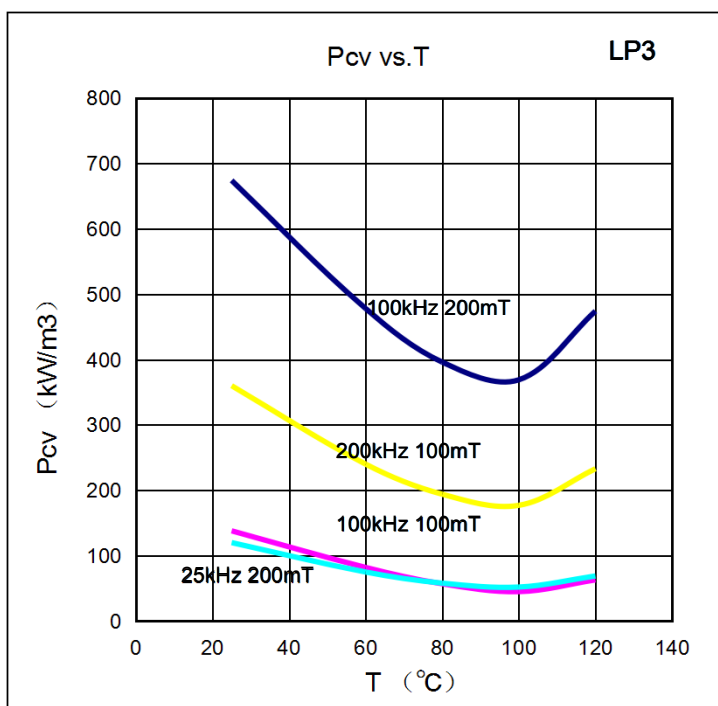
起始导磁率与温度关系

Permeability μ_i vs. Temperature T



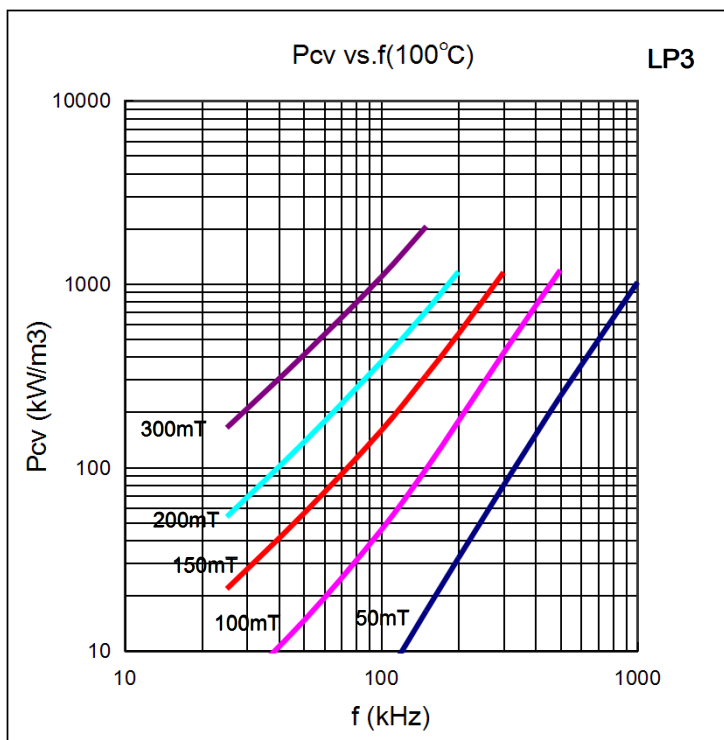
功率损耗与温度关系

Powerloss Pcv vs. Temperature



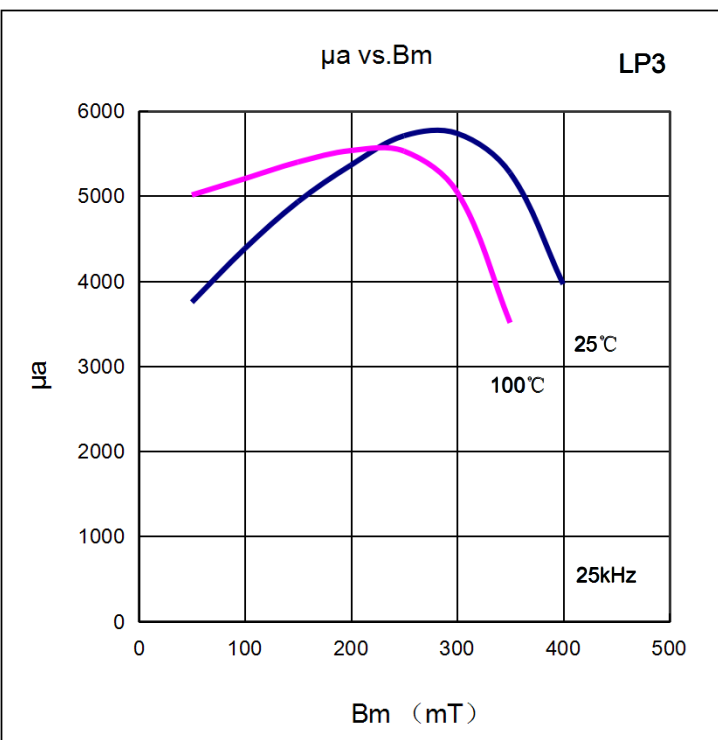
功率损耗与频率关系

Powerloss Pcv vs. frequency f



振幅磁导率与磁通密度关系

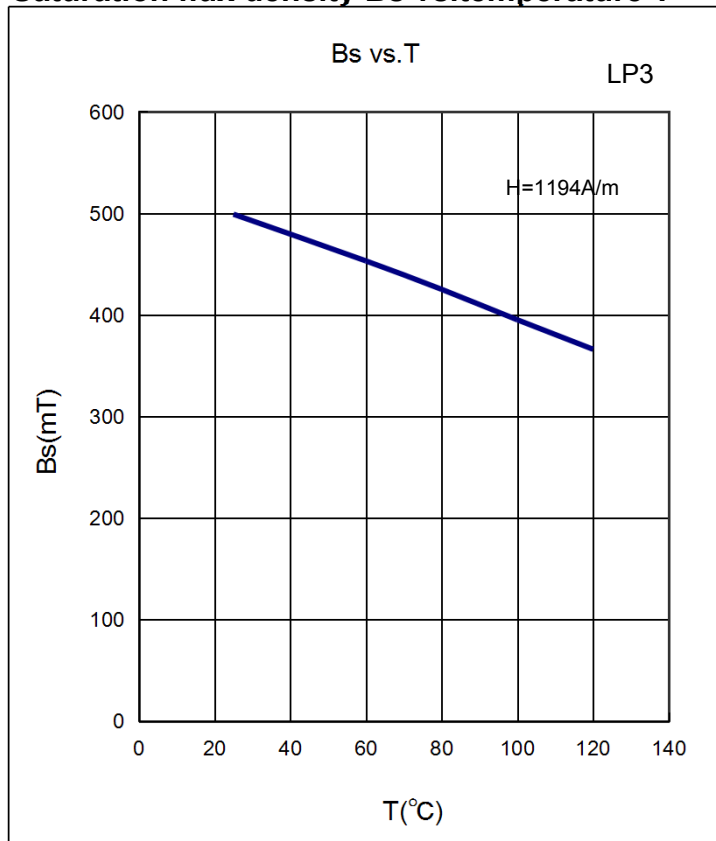
Amplitude permeability μ_a vs. flux density Bm



● LP3型功率铁氧体材料 Power ferrite material LP3

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

Flux density B vs. magnetic field H

