

# 承認書

## SPECIFICATION FOR APPROVAL

客戶名稱	鑫源洋	
CUSTOMER		
品名規格	PQ2013-1	JSP95
DESCRIPTION		
客戶料號		
DUS. P/N		
提出日期		
DATE	2017-6-21	

# 变更履历

## CHANGE RECORD

变更内容 DESCRIPTION	变更日期 Date	变更理由 REASON	变更担当 PERSON IN CHARGE
新版次 NEW	2017-6-21		冯劲松

上海继顺磁性材料有限公司

锰锌材料特性表

Mn-Zn material characteristics

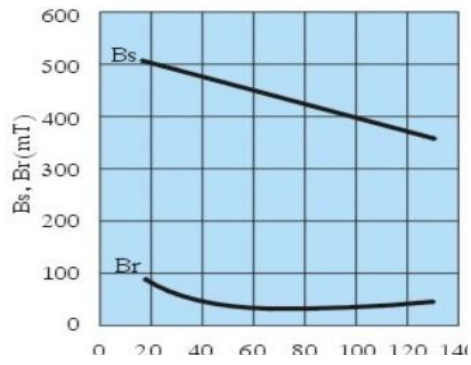
● P 系列

● P series

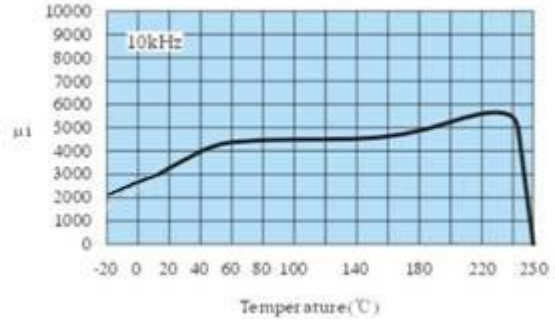
	单位 Unit	测试条件 Measuring Conditions		● JSP95
测试产品 TEST CORE		T25-15-10		
初始磁导率 $\mu_i$ Initial permeability	-	1kHz	23 ± 2°C	3300 ± 25%
磁损耗 $P_c$ Core loss	mW/cm <sup>3</sup>	100kHz 200mT	25°C	350
			80°C	280
			100°C	290
饱和磁感应强度 $B_s$ Saturation magnetic flux density	mT	1194A/m	25°C	520
			100°C	420
剩磁 $B_r$ Retentivity	mT		25°C	95
			100°C	55
矫顽力 $H_c$ Coercivity	A/m		25°C	14.3
			100°C	8.8
居里温度 $T_c$ Curie temperature	°C			> 220
电阻率 $\rho$ Resistivity	Ω.m			6.5
密度 $d$ Apparent density	g/cm <sup>3</sup>			4.8

● JSP95 锰锌材料特性图

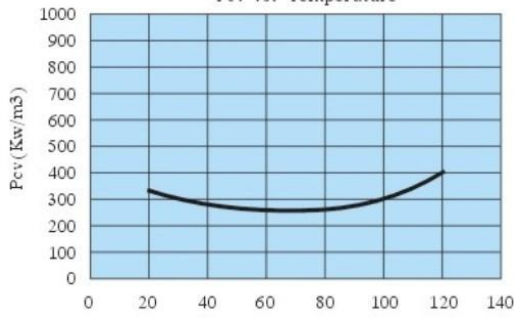
Bs, Br vs. Temperature



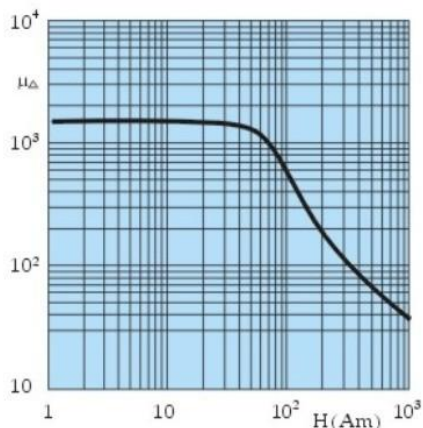
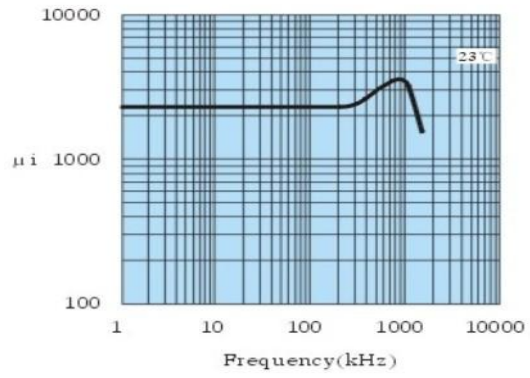
$\mu_i$  vs. Temperature



Pcv vs. Temperature

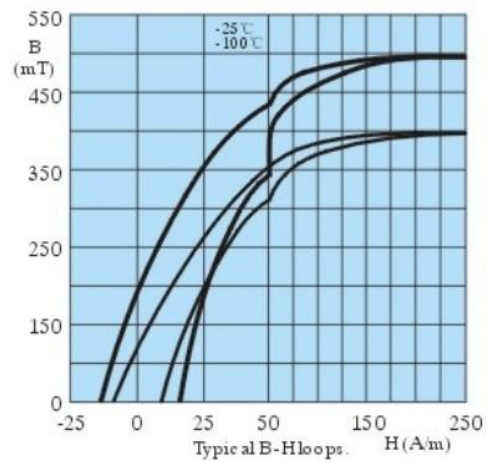


$\mu_i$  vs. Frequency



Incremental permeability as a function of magnetic field strength.

Typical B-H loops



# 電磁性能

## Electromagnetic

### 1 電感系数

**Inductance factor AL**

$$AL=3000 \pm 25\% \text{nH/N}^2$$

Inductance

測試條件和儀器

#### **Test Condition And Equipment**

- 測試溫度  $T=25 \pm 2^\circ\text{C}$   
Test Temperature
- 測試頻率和電壓  $f=1.0\text{KHz}; V=0.25\text{V}$   
Test Frequency And Voltage
- 測試線圈 10TS  
Test Coil  $\phi 0.31$
- \*氣隙厚度
- Gap Size
- 測試儀器 TH2816B  
Test Equipment

### 2 功率損耗

**Power Loss**

- 功率損耗質量密度  $P_{cm} \leq 115\text{mW/g}$

Power Loss per gram

測試條件和測試儀器

#### **Test Condition And Equipment**

- 測試溫度  $T = 100 \pm 2^\circ\text{C}$   
Test Temperature
- 測試頻率  $f=100\text{KHz};$   
Test Frequency
- 峰值磁通密度  $B_m=200\text{mT}$   
Peak Flux Density
- 測試線圈  $\phi 0.31 * 10\text{TS}$   
Test Coil
- 測試儀器 CH2335A

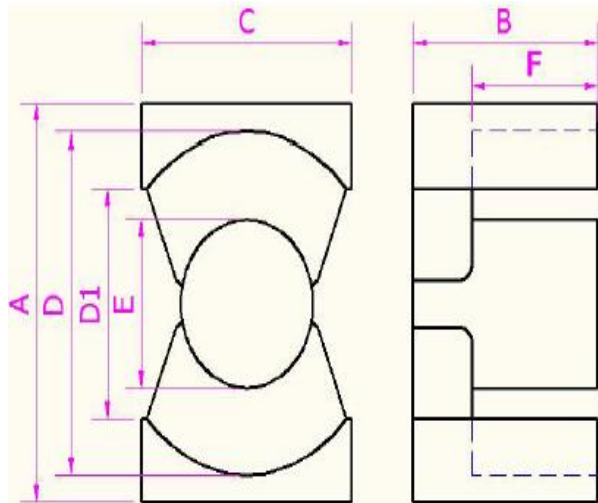
## 外觀要求

### APPEARANCE REQUIREMENT

- 磁芯表面清潔、色澤均勻、光滑、無明顯的疏松現象,磨加工面應平整。  
The surface of the core is clean,smooth and has no loose area,the color shows no variation and zhe ground surface is neat.
- 對於磁芯的掉塊：配合面上掉塊的大小不得超過所在面線度的 1/12；非配合面上，掉塊的大小不得超過所在面線度的 1/10；二者深度不得超過 0.5mm，數量分別不得超過兩處。配合面上的總的掉塊面積不得超過 1.0mm<sup>2</sup>,非配合面上總的掉塊面積不得超過 2.5mm<sup>2</sup>。  
The length of chips on zhe ground surface will be less than 1/12 length of the same surface.The length of chips on the other surface will be less than 1/10 length of the same surface .The depth of all the chips will be less than 0.5mm,the quantity of the chips will be less than 2.The area of the chips on the ground surface will be less than 1.0mm<sup>2</sup> ;the area of the chips on the other surface will be no more than 2.5mm<sup>2</sup> ..
- 對於磁芯的開裂，整個磁芯上，裂縫的寬度不得超過 0.1mm，長度不得超過該方向最大限度的 1/5，數量不得超過一處，並且這一裂縫不應該影響到磁芯的電氣性能和機械強度。  
The width of crack on the core will be less than 0.1mm and its length will be less than 1/5 length of the same surface .The quantity of the crack on the core will be less than 1 and this crack will not affect any electromagnetic property or mechanical strength.
- 不允許有影響使用的毛刺存在。  
There will be no burrs on the core,which influence the practical use of the core.
- 採用目測（或與樣件比較）和精度不低於 0.02mm 的卡尺檢查。  
Inspection equipment:Use eyesight(or sample compare)and slid gauge(high precision,not more than 0.02mm).

## 外形和尺寸

### OUTERLINE AND DIMENSIONNS



A	$20.60 \pm 0.50$
B	$6.80 \pm 0.20$
C	$14.00 \pm 0.40$
D	$18.00 \pm 0.40$
D1	13.00min
E	$8.80 \pm 0.20$
F	$4.25 \pm 0.20$
A-A'	$\leq 0.25$
Unit: mm	

磁芯常數 Core Factor C1(mm <sup>-1</sup> )	有效磁路長度 Effective Length Le(mm)	有效截面積 Effective area Ae(mm <sup>2</sup> )	有效體積 Effective Volume Ve(mm <sup>3</sup> )
0.73	37.6	51.1	1921.0

## 驗收規則

### INSPECTION RULE

- 產品的驗收規則按 GB2828 《逐批檢查計數抽樣程序及抽樣表》的依次抽樣方案的規定進行，電磁性能特殊檢查水平為 S-3，合格質量水平 AQL 為 0.65，其他項目為一般檢查水平 II.合格質量水平 AQL 為 1.5。

Product inspection should be done according to the rules of first time sampling plan which included in standard of GB2828 “sampling procedures and tables for lot-by-lot inspection by attributes” .The especial inspection level of electromagnetic as:S-3,AQL=0.65;The other term as general inspection level as: II ,AQL=1.5.

- 客戶在接收到磁芯產品后十天內須驗收完畢，并請將驗收結果書面通知供貨方，否則，視為已驗收合格。

The customer should finish the work of inspection within 10days after received the cores and please send the Result of inspection to the supplier in report as quickly as possible.If no report was given to the supplier,the cores be treated as qualified products.

## 說明

### NOTE

- 本承認書的數據更改須經雙方確認，任一方單獨修改無效。

Any revise to the contents this Approval Application must be confirmed by the customer and the supplier,otherwise the revise is invalid.

- 本承認書一式二份，確認后請返回一份原件。

After the customer has confirmed Approval Application(tatal 2 books),please send 1 book to supplier.