

MULTILAYER FERRITE CHIP BEAD FOR HIGH SPEED AND
LARGE CURRENT

片式铁氧体尖峰大电流磁珠



PSPB SERIES



深圳嘉嵘伟业电子有限公司

SHENZHEN JIARONG WEIYE ELECTRONICS CO., LTD.

Tel: 0755-2917 5978

FAX: 133 7842 9168

Website: www.ransioning.com

E-mail: admin@ransioning.com

Multilayer Ferrite Chip Bead for High Speed and Large Current-PSPB Series



片式铁氧体尖峰大电流磁珠-PSPB 系列

INTRODUCTION AND CHARACTERISTICS 产品介绍及特性

INTRODUCTION

◆ A ferrite bead is a passive electric component that suppresses high frequency noise in electronic circuits. It is a specific type of electronic choke. Ferrite beads employ the dissipation of high frequency currents in a ferrite ceramic to build high frequency noise suppression devices. Multilayer Ferrite Chip Bead for High Speed is sharp impedance characteristics at desirable frequency and does not affect the signal frequency. Smaller DC resistance and larger rate current than PFSB series.

产品介绍

◆磁珠是一种被动元件，用来抑制电路中的高频噪声。磁珠是一种特别的扼流圈，其成份多半为铁氧体，利用其高频电流产生的热耗散来抑制高频噪声。片式铁氧体尖峰磁珠在某频率区域内，其阻抗值急剧上升，从而在特定的频率区域内获得较高的衰减效果而对信号不产生影响。相对于 PFSB 系列具有更小的直流电阻和更大的额定电流。

CHARACTERISTICS

- ◆ Monolith structure for high reliability
- ◆ No cross coupling due to magnetic shield
- ◆ Perfect shape for mounting with no directionality
- ◆ Excellent solderability and high heat resistance for reflow soldering or wave soldering

特性

- ◆ 积层独石结构、高可靠性
- ◆ 良好的磁屏蔽，无交叉耦合
- ◆ 无引线结构，适合表面安装
- ◆ 良好的焊接性，适合于回流焊或波峰焊

APPLICATIONS

- ◆ Mother board, tablet PC, notebook, desktop computers and peripheral equipment
- ◆ DSC, DVC, LCD Television, Set Top Box
- ◆ Mobile phone, smart phone, PHD
- ◆ Redialed noise suppression on digital product clock lines signal lines and suppression noise on circuit

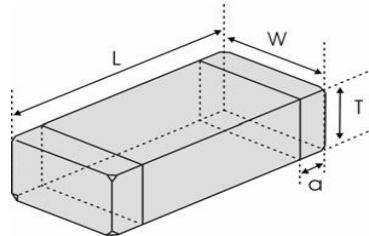
应用产品

- ◆ 主机板，平板电脑，笔记型，桌上型电脑及其周边设备
- ◆ 数位相机，数位摄影机，液晶电视机，数位机上盒
- ◆ 行动电话，智能手机，个人导航设备
- ◆ 用于数据传输线、信号线。电源及回路部分的抗干扰

PRODUCT IDENTIFICATION 产品型号
PSPB 1608 S 601 T R15

① ② ③ ④ ⑤ ⑥

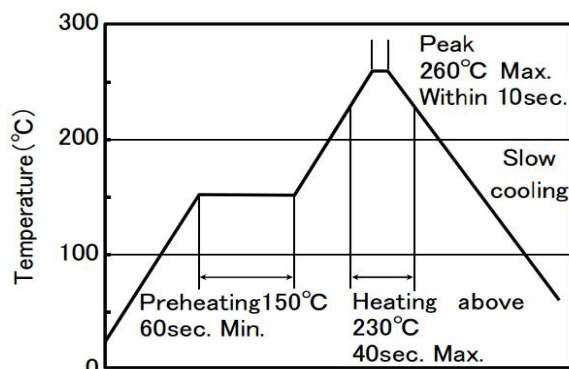
① Product Series Code 产品系列码	PSPB	Multilayer Ferrite Chip Bead for High Speed and Large Current 片式铁氧体尖峰大电流磁珠
② Size Code 尺寸码	1608	长×宽 (L×W) (mm) 1.6×0.8
③ Material Code 材质代号	--	P M S
④ Nominal Impedance 阻抗	600	60 Ω
	601	600 Ω
⑤ Packing 包装形式	T	Tape and Reel 编带
⑥ Rated Current 额定电流值	2R0	2000mA
	R15	150mA

SHAPE AND DIMENSIONS 外观尺寸


SIZE 尺寸	L 长 mm	W 宽 mm	T 厚 mm	a 银厚 mm
1005(0402)	1.0±0.15	0.5±0.15	0.5±0.15	0.15~0.35
1608(0603)	1.6±0.15	0.8±0.15	0.8±0.15	0.1~0.5

STORAGE AND OPERATING CONDITIONS 储存及操作条件

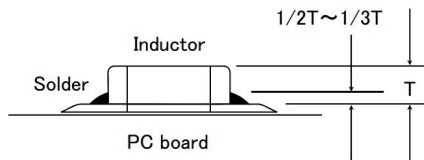
Operating Temperature Range	-55℃~+125℃
Storage Temperature and Humidity Range	-10℃~+40℃, 70%RH max.

RECOMMENDED SOLDERING CONDITION 建议焊锡方式
REFLOW SOLDERING 回流焊


- ① Ceramic chip components should be preheated to within 100 to 130℃ of the soldering.
- ② Assured to be reflow soldering for 2 times.

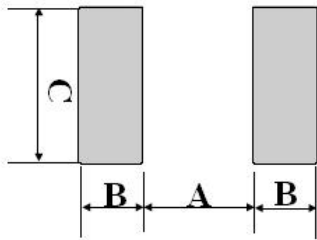
Caution:

1)The ideal condition is to have solder mass (fillet) controlled to 1/2 to 1/3 of the thickness of the inductor.



2)Because excessive dwell times can detrimentally affect solderability, soldering duration should be kept as close to recommended times as possible.

RECOMMENDED LAND PATTERN 推荐的焊盘尺寸

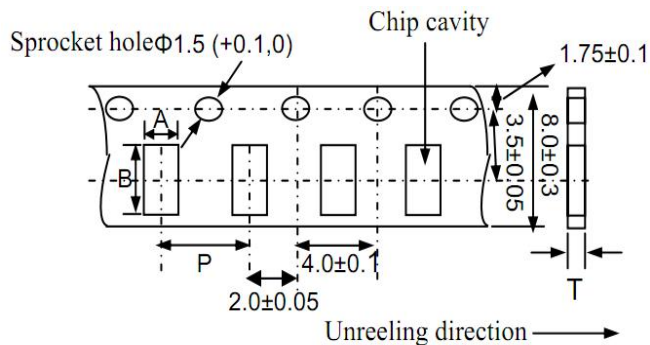


Dimension (mm)	A (mm)	B (mm)	C (mm)
1005	0.45~0.55	0.40~0.50	0.45~0.55
1608	0.6~0.8	0.6~0.8	0.6~0.8

PACKING STANDARD 包装标准

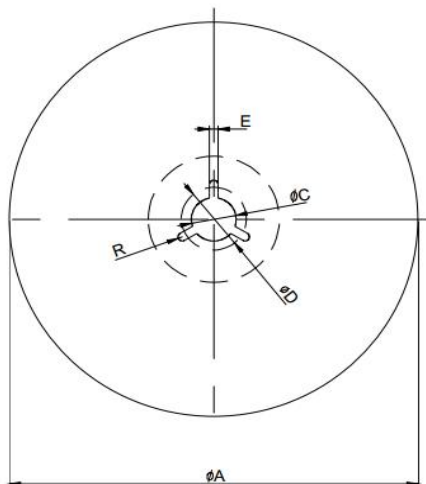
Taping Dimensions

◆ Paper tape (8mm wide)



Type	Chip Thickness	A	B	P	T max.	Quantity (pcs/reel)
		(mm)				
PSPB1005	0.50	0.65	1.15	2	0.80	10000
PSPB1608	0.80	1.00	1.80	4	1.10	4000

◆ Reel Dimensions



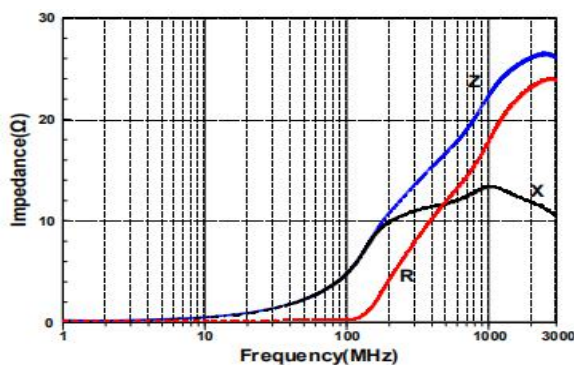
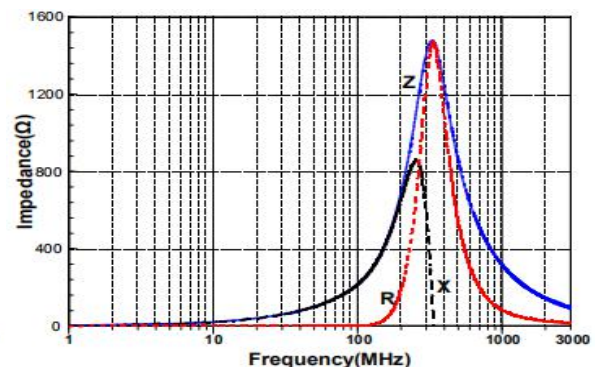
Symbol	ø178mm Reel	Ø330mm Reel
A	Ø178±2	Ø330±2
B	Ø60±2	Ø100±2
C	Ø13±0.8	Ø13±0.8
D	Ø21±0.8	Ø21±0.8
E	2	2
W8	10±1.5	10±1.5
W12	14.5±1.5	14.5±1.5
W16	--	17.4(Typ.)
W24	--	24.4(Typ.)
T	2±0.5	2±0.5
R	1	1

SPECIFICATIONS 规格特性
PSPB 1005(0402) TYPE

Part Number 型号	Impedance At 100MHz 阻抗 Z	DC Resistance 直流电阻 RDC	Rated Current 额定电流 Ir	Thickness 厚度
Units 单位	$\Omega \pm 25\%$	Ω (Max.)	mA (Max.)	mm
PSPB1005S050TR50	0~15	0.08	500	0.5 ± 0.15
PSPB1005S221TR25	220	0.60	250	0.5 ± 0.15
PSPB1005M750TR60	75	0.20	600	0.5 ± 0.15
PSPB1005M121TR40	120	0.30	400	0.5 ± 0.15
PSPB1005M221TR30	220	0.40	300	0.5 ± 0.15
PSPB1005M301TR30	300	0.55	300	0.5 ± 0.15
PSPB1005M471TR20	470	0.60	200	0.5 ± 0.15
PSPB1005M601TR20	600	0.65	200	0.5 ± 0.15
PSPB1005M102TR20	1000	0.90	200	0.5 ± 0.15
PSPB1005M152TR10	1500	1.20	100	0.5 ± 0.15
PSPB1005M182TR10	1800	1.40	100	0.5 ± 0.15

PSPB 1608(0603) TYPE

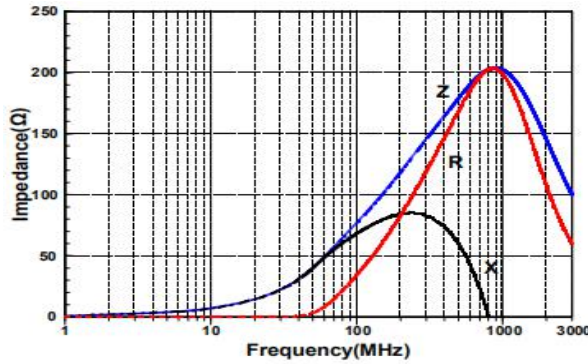
Part Number 型号	Impedance At 100MHz 阻抗 Z	DC Resistance 直流电阻 RDC	Rated Current 额定电流 Ir	Thickness 厚度
Units 单位	$\Omega \pm 25\%$	Ω (Max.)	mA (Max.)	mm
PSPB1608S600TR80	60	0.25	800	0.8 ± 0.15
PSPB1608S121TR70	120	0.30	700	0.8 ± 0.15
PSPB1608S221TR60	220	0.45	600	0.8 ± 0.15
PSPB1608S331TR55	330	0.58	550	0.8 ± 0.15
PSPB1608M601TR30	600	0.60	300	0.8 ± 0.15
PSPB1608M102TR25	1000	0.70	250	0.8 ± 0.15
PSPB1608M152TR25	1500	0.75	250	0.8 ± 0.15
PSPB1608M182TR20	1800	0.85	200	0.8 ± 0.15
PSPB1608M222TR20	2200	0.90	200	0.8 ± 0.15
PSPB1608M252TR20	2500	1.00	200	0.8 ± 0.15

TYPICAL ELECTRICAL CHARACTERISTICS 典型电气特性
Z, R, X vs. FREQUENCY CHARACTERISTICS
PSPB1005S050

PSPB0603S221


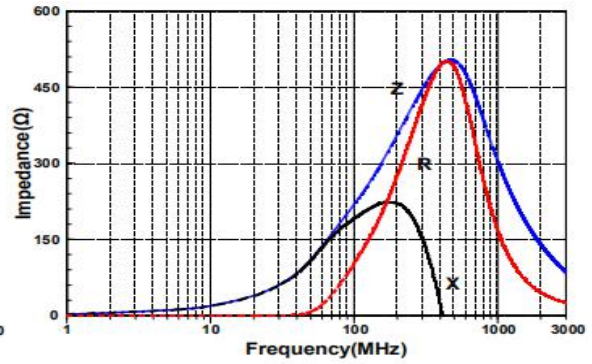
TYPICAL ELECTRICAL CHARACTERISTICS 典型电气特性

Z, R, X vs. FREQUENCY CHARACTERISTICS

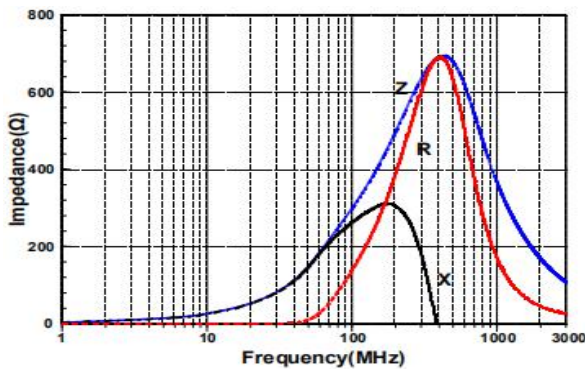
PSPB1005M750



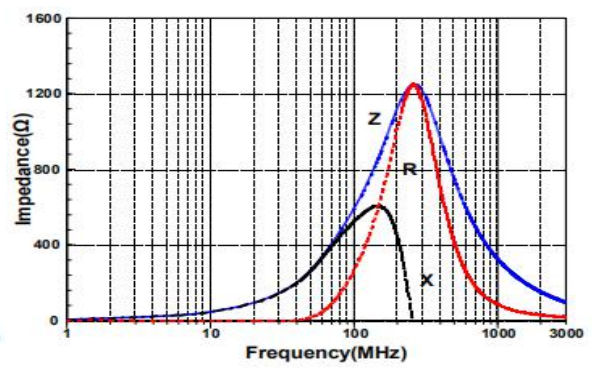
PSPB1005M221



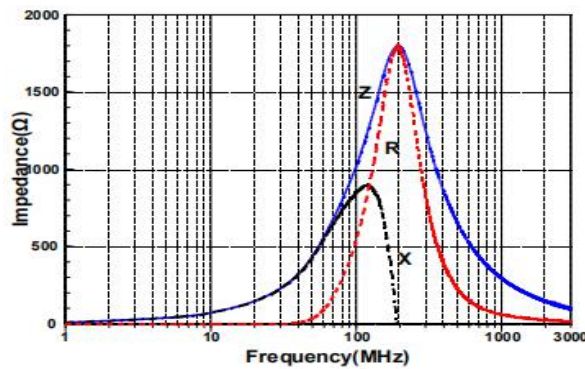
PSPB1005M301



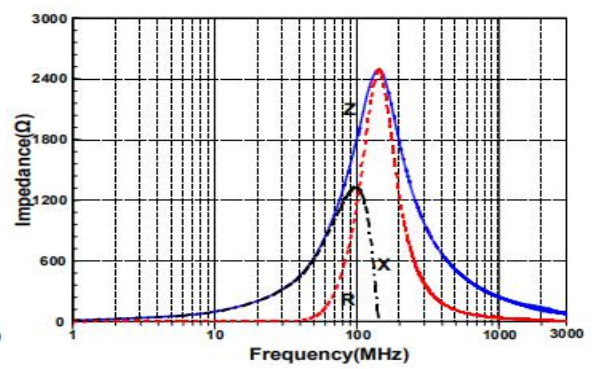
PSPB1005M601



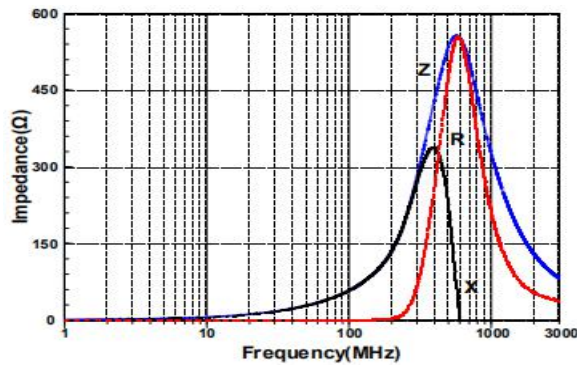
PSPB1005M102



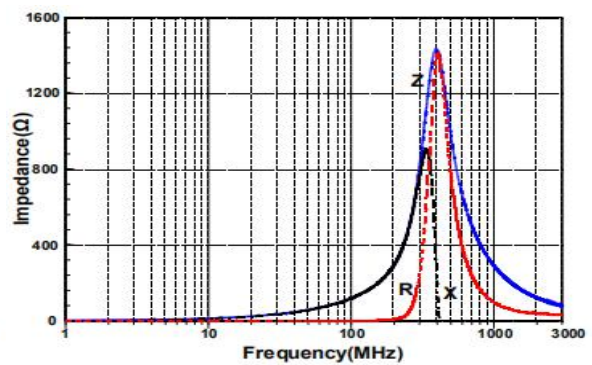
PSPB1005M182



PSPB1608S600



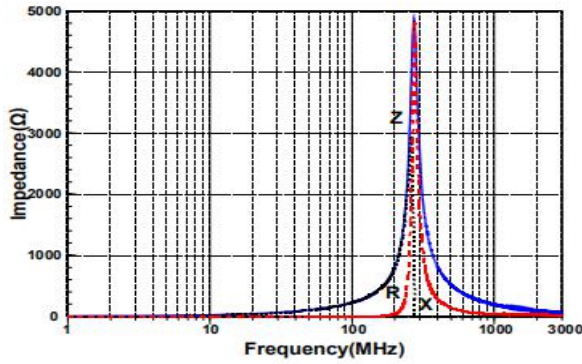
PSPB1608S121



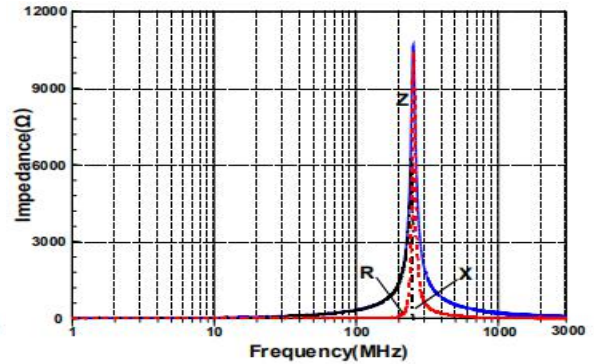
TYPICAL ELECTRICAL CHARACTERISTICS 典型电气特性

Z, R, X vs. FREQUENCY CHARACTERISTICS

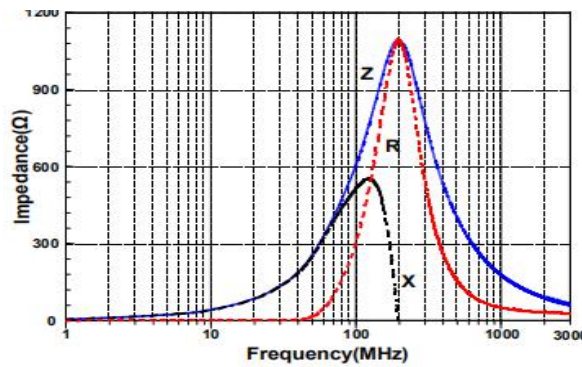
PSPB1608S221



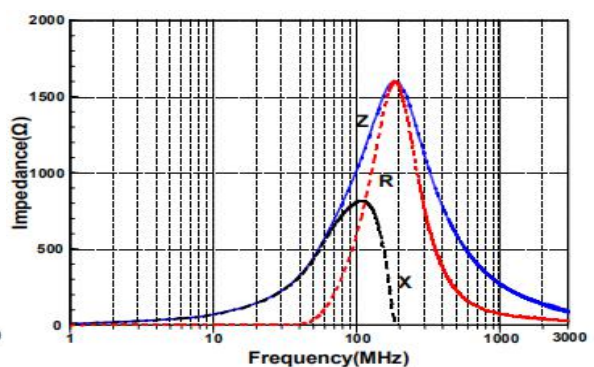
PSPB1608S331



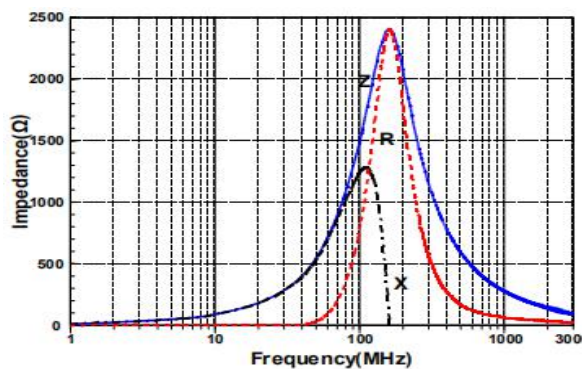
PSPB1608M601



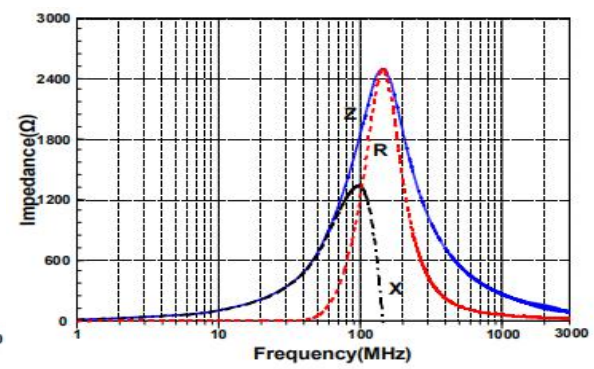
PSPB1608M102



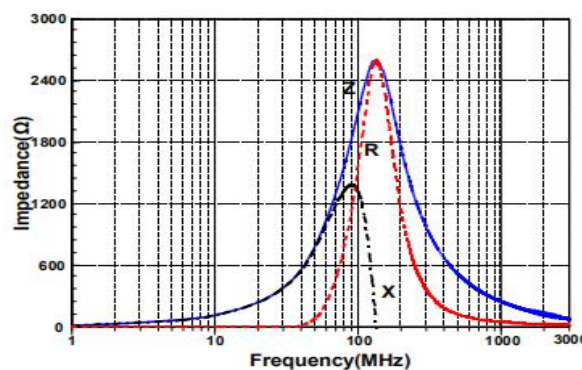
PSPB1608M152



PSPB1608M182



PSPB1608M222



PSPB1608M252

