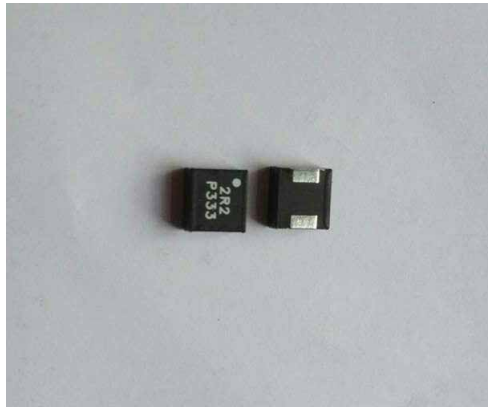


Shielded Power Inductors-PS545120

外觀尺寸



SHAPE AND DIMENSIONS

- 5.74 × 5.43 mm footprint; 2.0 mm high shielded inductors
- Low DCR and excellent current handling

Core material Ferrite

Core and winding loss See www.FRcoil.com

Terminations RoHS compliant matte tin over nickel over phosphorus bronze. Other terminations available at additional cost.

Weight:

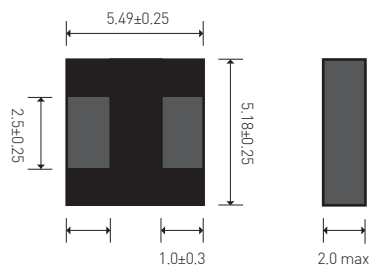
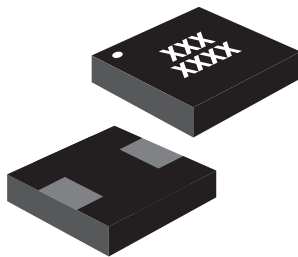
Ambient temperature -40°C to +85°C with I rms current, +85°C to +125°C with derated current

Storage temperature Component: -40°C to +125°C.

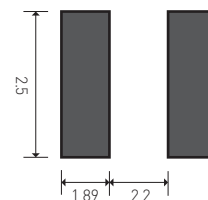
Packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

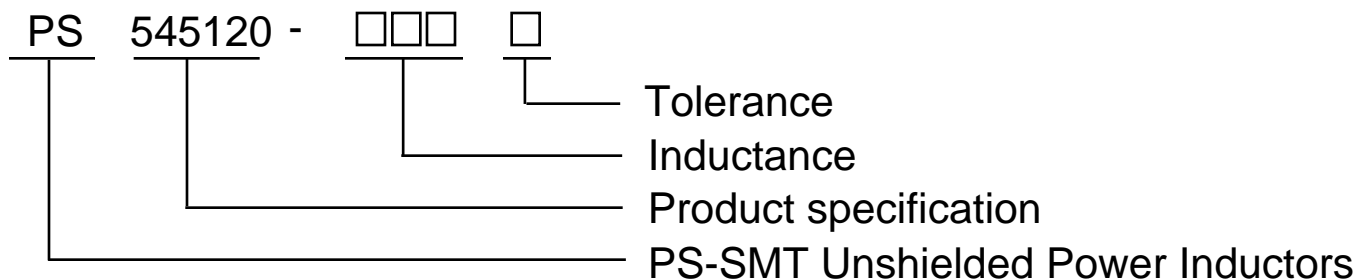


Dimensions are in $\frac{\text{inches}}{\text{mm}}$



產品型號

PRODUCT IDENTIFICATION



Tolerance:

Code	Tolerance
102	1.0uH
103	10.0uH
104	100.0uH
105	1000.0uH
106	10000.0uH

Inductance:

Code	Tolerance
J	± 5%
K	± 10%
L	± 15%
M	± 20%
N	± 30%



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ADD:廣東省深圳市南山區後海工業七路8號
Tel/Fax:0755-21606613/21606608

Http://www.frcoil.com
Email:xy@frcoil.com

Shielded Power Inductors-PS545120

規格特性

SPECIFICATIONS

Parts No.	Inductance (μH)	Tolerance (%)	DC Resistance (mΩ) Max. (Typ.)	Rated DC Current(A) Max. (Typ.)	
				ΔL/L=20%	ΔT=40℃
PS545120-R33	0.33	±20	9.6 (8)	14.0	7.9
PS545120-R47	0.47	±20	12 (10)	11.0	7.6
PS545120-R68	0.68	±20	16 (13)	10.0	6.6
PS545120-1R0	1.0	±20	21 (17)	8.0	5.9
PS545120-1R5	1.5	±20	29 (24)	6.8	4.8
PS545120-2R2	2.2	±15	36 (30)	6.0	4.1
PS545120-3R3	3.3	±15	60 (50)	4.9	3.6
PS545120-4R7	4.7	±15	78 (65)	4.4	2.8
PS545120-5R6	5.6	±15	90 (75)	4.2	2.6
PS545120-6R8	6.8	±15	102 (85)	4.0	2.4
PS545120-10R	10.0	±15	162 (135)	3.0	1.9
PS545120-15R	15.0	±15	222 (185)	2.5	1.7

1. Inductance is measured with a LCR meter 4294A(Agilent Technologies) or equivalent. (@100kHz, 0.1Vrms)

2. DC Resistance is measured with a Digital Multimeter 3541 (Hioki) or equivalent.

3. Maximum allowable DC current is that which caused a 20% inductance reduction from the initial value, coil temperature to rise by 40℃whichever is smaller.
(Ambient temp. 20℃)



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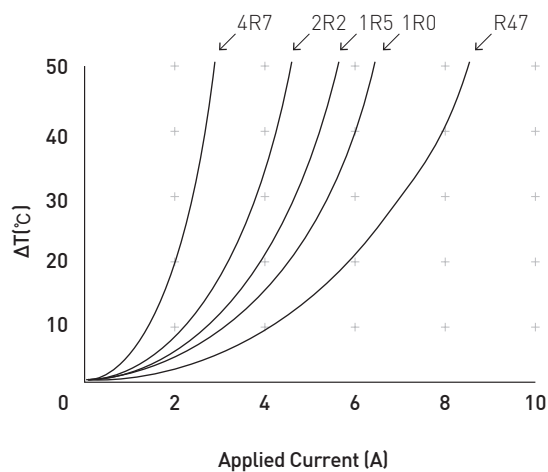
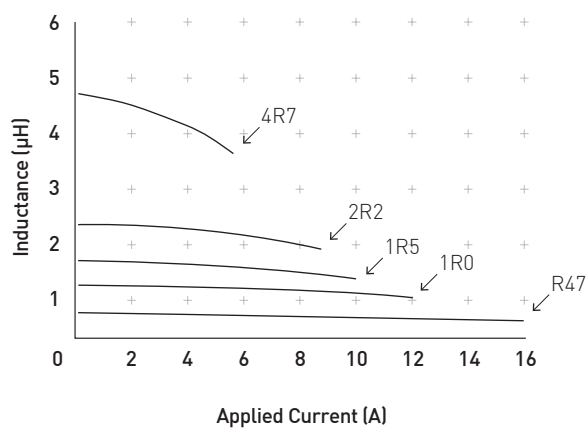
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Shielded Power Inductors-PS545120

電氣特性

TYPICAL ELECTRICAL CHARACTERISTICS

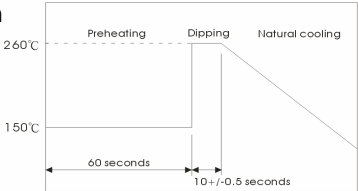
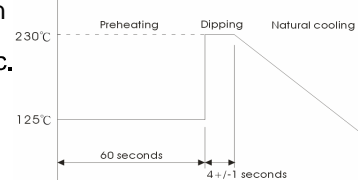


Shielded Power Inductors-PS545120

電氣特性

TYPICAL ELECTRICAL CHARACTERISTICS

Reliability and Test Conditions (可靠性測試條件)

ITEM	Performance	Test Condition
Operating Temperature 操作溫度	-55℃~125℃	10Pcs Passed
Storage temperature 儲存溫度	-40℃~+85℃	10Pcs Passed
Rated Current 額定電流	Refer to standard electrical characteristics list. 參考標準特性規格表	10Pcs Passed
Temperature Rise Test 溫升測試	40℃ max.(Δt) 40度最大	10Pcs Passed
Electrical Performance Test		
Solder Heat Resistance 耐焊錫熱	Appearance:No significant abnormality. Inductance change:Within $\pm 20\%$. 外觀：無顯著異常 電感值：變異值在初始值20%之內	Preheat:150℃,60sec. Solder:H63A solder temperature:260 ± 5 ℃ Flux for lead free:rosin Dip time:10 ± 0.5 sec. 預熱：150℃,60sec. 錫爐溫度：260 ± 5 ℃ 時間：10 ± 0.5 sec. 助焊劑：rosin 
Solderability Test 端面焊錫性	More than 90% of the terminal electrode should be covered with solder. 端電極之錫覆蓋面達90%以上	Preheat:125 ± 25 ℃,60sec. Solder:H63A solder temperature:230 ± 5 ℃ Flux for lead free:rosin Dip time:4 ± 1 sec. 預熱：125 ± 25 ℃,60sec. 錫爐溫度：230 ± 5 ℃ 時間：4 ± 1 sec. 助焊劑：rosin 
High Temperature Resistance Test 高溫放置測試	Appearance:no damage. Inductance:within $\pm 20\%$ of initial value. No disconnection or short circuit. 外觀不能破損 電感值:變異值在初始值20%之內. 電性無短路或斷線	Temperature:85 ± 2 ℃. Applied current: rated current. Duration: 500 hrs.
Humidity Resistance Test 高濕放置測試	Appearance:no damage. Inductance:within $\pm 20\%$ of initial value. No disconnection or short circuit. 外觀不能破損 電感值:變異值在初始值20%之內. 電性無短路或斷線	Temperature:40 ± 2 ℃. Applied current: rated current. Duration: 500 hrs. Humidity: 90~95%



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Shielded Power Inductors-PS545120

電氣特性

TYPICAL ELECTRICAL CHARACTERISTICS

Reliability and Test Conditions (可靠性測試條件)

ITEM	Performance	Test Condition															
Thermal shock 熱衝擊試驗	Appearance: no damage. Inductance: within $\pm 20\%$ of initial value. No disconnection or short circuit. 外觀不能破損 電感值：變異值在初始值20%之內。 電性無短路或斷線	Condition for 1 cycle Step1:-25 $\pm 2^{\circ}\text{C}$, 30 ± 3 min. Step2:Room temperature within 15 min. Step3:+85 $\pm 5^{\circ}\text{C}$, 30 ± 3 min. Step4: Room temperature within 15 min. Number of cycles: 50 <table border="1"> <thead> <tr> <th>Phase</th><th>Temperature($^{\circ}\text{C}$)</th><th>Time(min)</th></tr> </thead> <tbody> <tr> <td>1</td><td>-25$\pm 2^{\circ}\text{C}$</td><td>30± 3</td></tr> <tr> <td>2</td><td>Room Temp.</td><td>15</td></tr> <tr> <td>3</td><td>+85$\pm 2^{\circ}\text{C}$</td><td>30± 3</td></tr> <tr> <td>4</td><td>Room Temp.</td><td>15</td></tr> </tbody> </table>	Phase	Temperature($^{\circ}\text{C}$)	Time(min)	1	-25 $\pm 2^{\circ}\text{C}$	30 ± 3	2	Room Temp.	15	3	+85 $\pm 2^{\circ}\text{C}$	30 ± 3	4	Room Temp.	15
Phase	Temperature($^{\circ}\text{C}$)	Time(min)															
1	-25 $\pm 2^{\circ}\text{C}$	30 ± 3															
2	Room Temp.	15															
3	+85 $\pm 2^{\circ}\text{C}$	30 ± 3															
4	Room Temp.	15															
Humidity Resistance 高濕測試	Appearance: no damage. Inductance: within $\pm 20\%$ of initial value. No disconnection or short circuit. 外觀不能破損 電感值：變異值在初始值20%之內。 電性無短路或斷線	Humidity:90~95%RH. Temperature:40 $\pm 5^{\circ}\text{C}$. Applied current:rated current. Duration:500 ± 12 hrs. Measured at room temperature after placing for 2 to 3hrs. 濕度:90~95%RH. 溫度:40 $\pm 5^{\circ}\text{C}$. 須加電流:額定電流. 放置時間:500 ± 12 hrs.															

卷盤包裝

REEL PACKAGING

Taping for automatic insertion of SMT coils.

Surface mount devices/adjustable & fixed

This ever expanding assortment of product and unsurpassed quality control,not only give you a component that functionally performs,but just as importantly,allows the use of a variety of placement and soldering equipment necessary for the FLEXIBLE MANUFACTURING PLANT required in today's competitive world.

Various packaging schemes are available.In addition to bulk,tape and reel and magazine,methods are offered for high volume insertion equipment.The following chart lists the packaging details for FRE's SMD coils

自動插入編帶的表面貼裝線圈

表面貼裝設備/可調整型和固定型

它可以擴展到產品分類和非常突出的質量控制。不只是給你一各構成方面的優良的性能表現，而且最重要的，允許在當今這個競爭世界中要求的靈活製造廠使用多樣化的放置和焊接設備。

可以使用多樣的包裝方案。提供批量散裝和卷盤包裝共大量入設備使用。以下圖表為富爾的SMD線圈羅列包裝 細節：