



深圳市富爾電子科技有限公司

ADD:廣東省深圳市南山區後海工業七路8號 <http://www.frcoil.com>

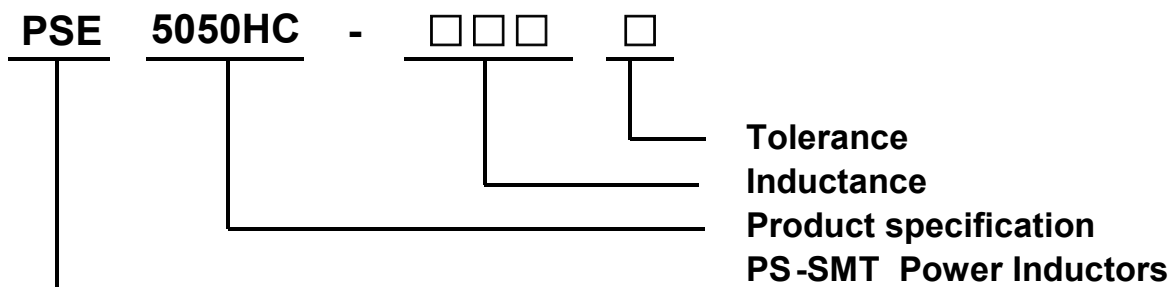
Tel/Fax:0755-21606613/21606608

Email:xy@frcoil.com

SMT Power Inductors- PSE5050HC

产品型号

PRODUCT IDENTIFICATION



Tolerance:

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

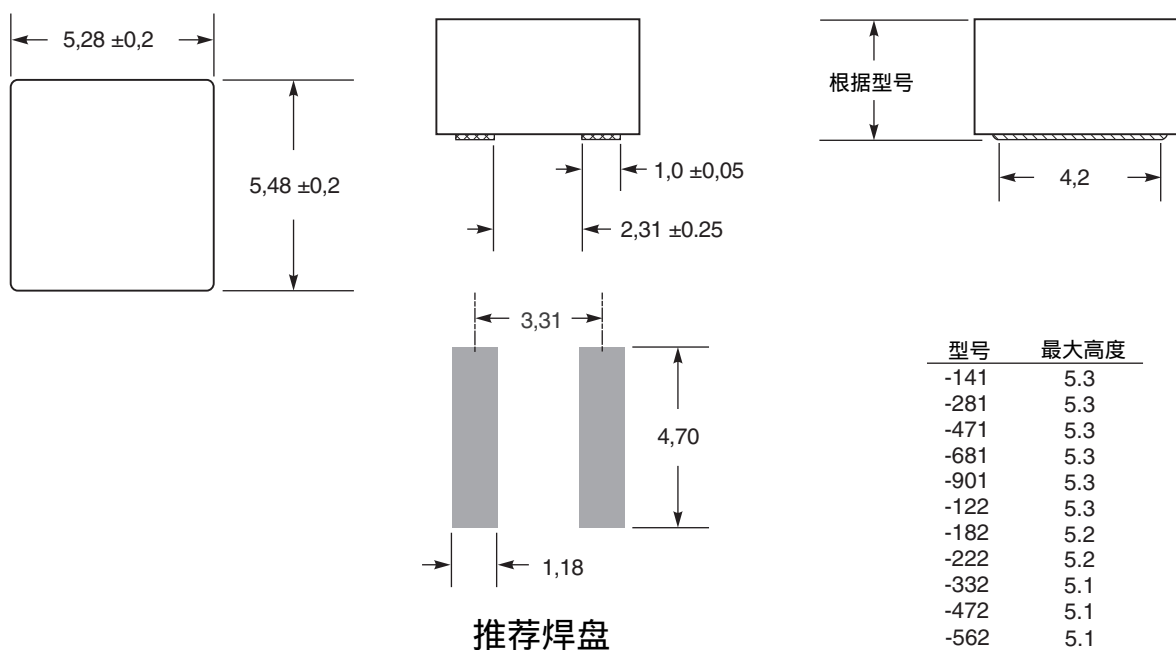
Inductance:

Code	Tolerance
J	$\pm 5\%$
K	$\pm 10\%$
L	$\pm 15\%$
M	$\pm 20\%$
N	$\pm 30\%$

外观尺寸

SHAPE AND DIMENSIONS

单位：mm



型号	最大高度
-141	5.3
-281	5.3
-471	5.3
-681	5.3
-901	5.3
-122	5.3
-182	5.2
-222	5.2
-332	5.1
-472	5.1
-562	5.1
-682	5.1
-822	5.1
-103	5.1
-153	5.1
-223	5.1



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规格特性

SPECIFICATIONS

Part number	Inductance (uH)	Percent tolerance	DCR max (mOhms)	SRF typ (MHz)	Isat (A)	Irms(A)	
						20°C rise	40°C rise
PSE5050HC-141M	0.14 @ 1MHZ	20	1.78	189	39	24.6	35.1
PSE5050HC-281M	0.28 @ 1MHZ	20	2.64	117	28	22.2	30.1
PSE5050HC-471M	0.47 @ 1MHZ	20	3.6	78	21	18.8	26
PSE5050HC-681M	0.68 @ 1MHZ	20	4.55	68	18.2	15.8	22
PSE5050HC-901M	0.90 @ 1MHZ	20	5.6	60	17.2	14.3	19.6
PSE5050HC-122M	1.2 @ 1MHZ	20	6.48	51	15.2	12.8	17.3
PSE5050HC-182M	1.8 @ 1MHZ	20	9.34	43	12.8	10.5	14.4
PSE5050HC-222M	2.2 @ 1MHZ	20	12.43	38	9.5	9	12.1
PSE5050HC-332M	3.3 @ 1MHZ	20	14.6	31	8.4	7.8	10.6
PSE5050HC-472M	4.7 @ 1MHZ	20	21.5	24	7.4	5.9	8.1
PSE5050HC-562M	5.6 @ 1MHZ	20	24.8	23	6.6	5.5	7.6
PSE5050HC-682M	6.8 @ 1MHZ	20	29.45	21	6	4.7	6.4
PSE5050HC-822M	8.2 @ 1MHZ	20	34.95	18	5.6	4.5	6.1
PSE5050HC-103M	10.0 @ 1MHZ	20	45	15	4.9	3.6	4.9
PSE5050HC-153M	15.0 @ 1MHZ	20	76.7	13	3.7	2.9	3.9
PSE5050HC-223M	22.0 @ 1MHZ	20	99.65	11	3.6	2.5	3.4



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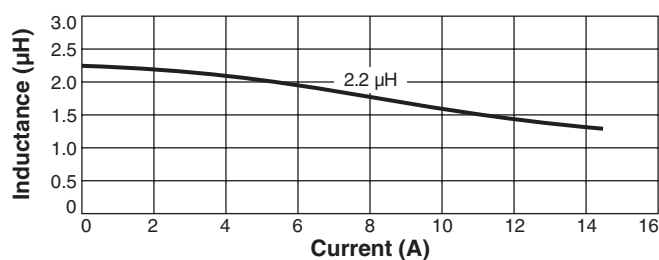
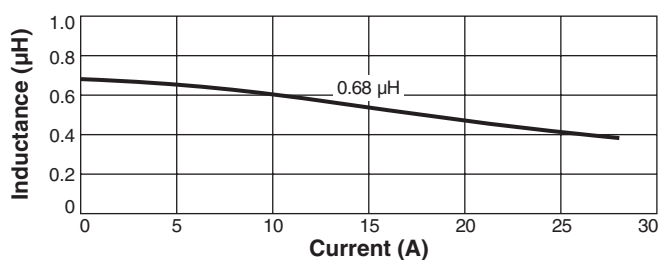
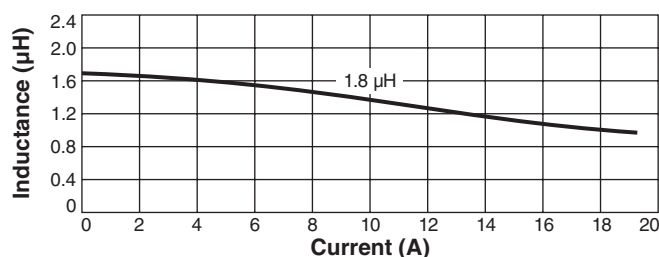
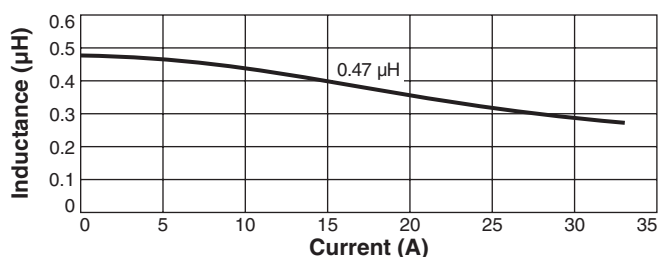
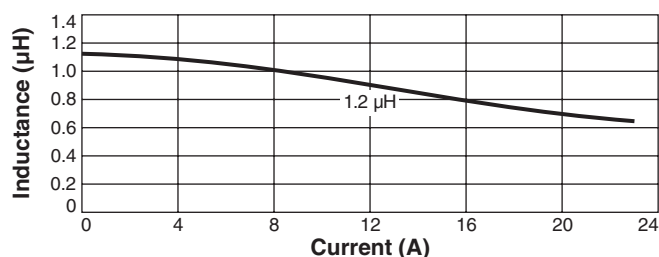
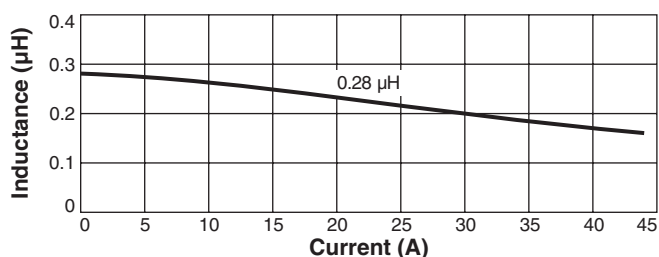
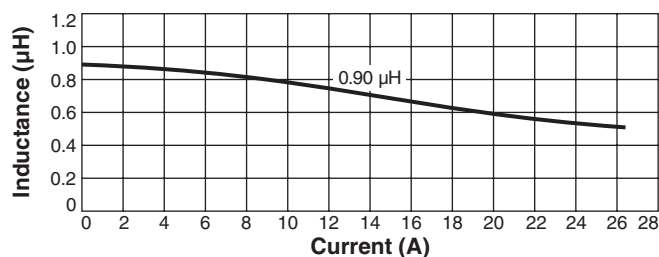
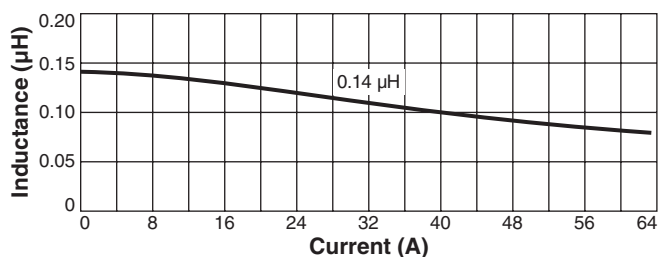
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SMT Power Inductors- PSE5050HC

电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

Typical L vs Current





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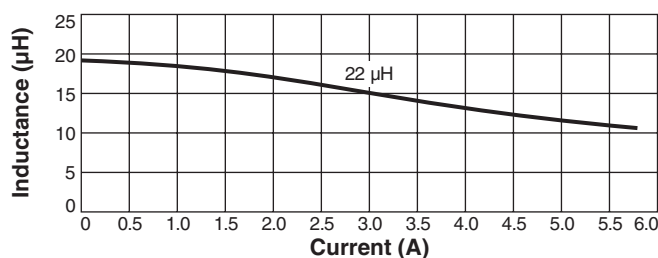
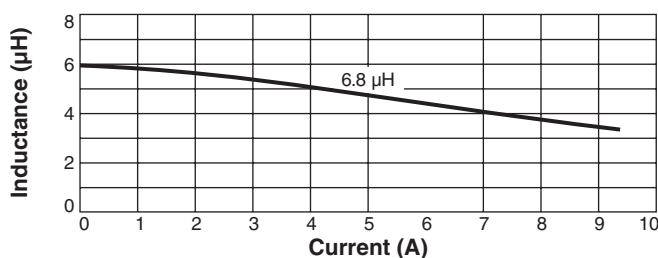
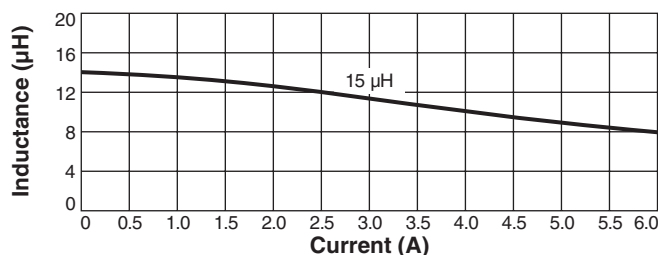
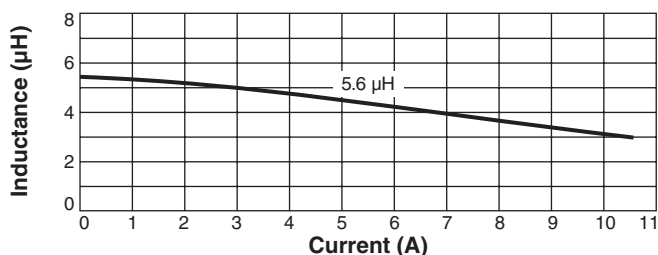
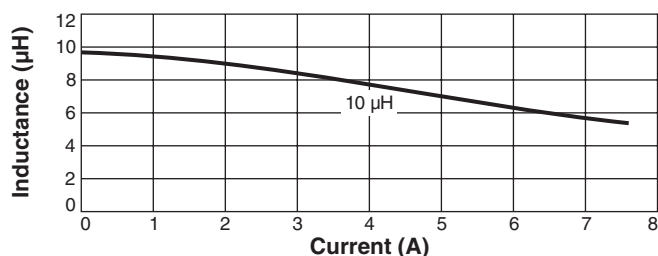
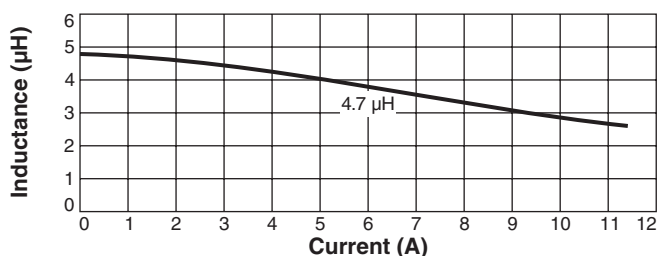
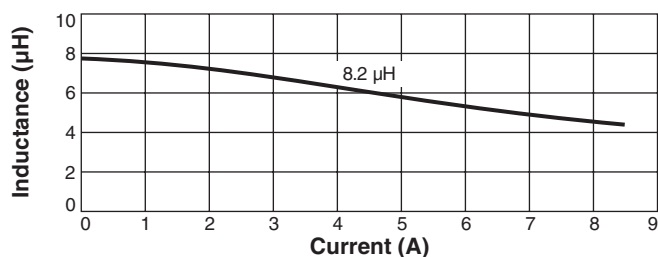
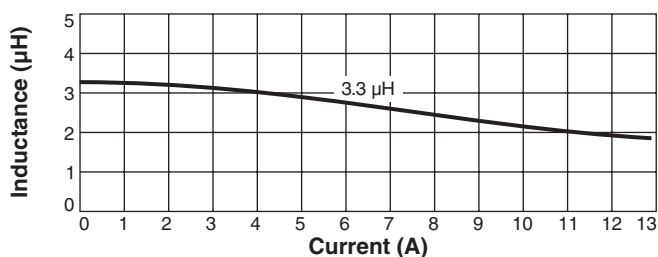
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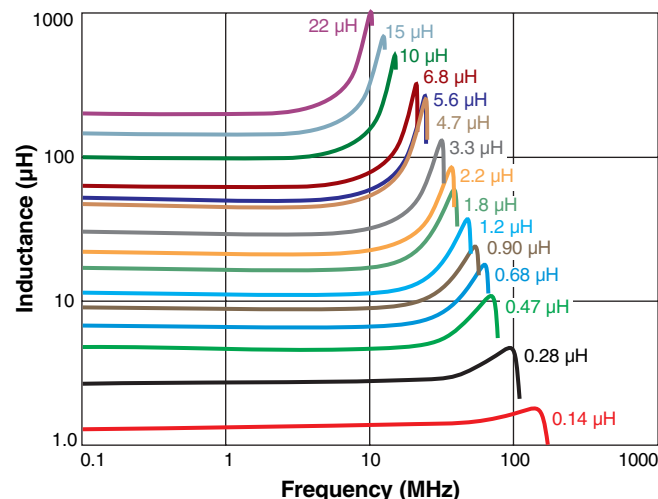
电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

Typical L vs Current



Typical L vs Frequency





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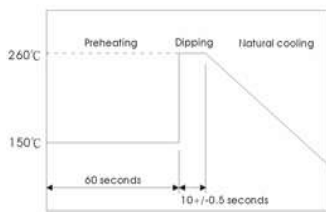
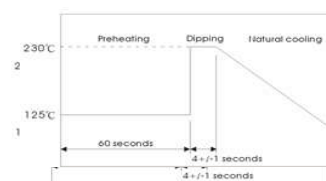
电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

PASSED MEASUREMENT / 通过如下测量

ITEM	Test condition	Test Result
Operating Temperature 操作温度	-40℃ ~ +125℃	5Pcs Passed
Storage temperature 储存温度	-55℃ ~ 125℃	5Pcs Passed
Rated Current 额定电流	Refer to standard electrical characteristics list 参考标准特性规格表	5Pcs Passed
Temperature Rise Test 温升测试	40℃ max.(Δt) 40度最大	5Pcs Passed

Electrical Performance Test

Solder Heat Resistance 耐焊锡热	Appearance: No significant abnormality. Inductance change: Within $\pm 20\%$. 外观: 无显著异常。 电感值: 变异性在初始值 $\pm 20\%$ 以内。	Preheat: 150℃, 60sec. Solder: H63A Solder temperature: 260 ± 5 ℃ Flux for lead free: rosin Dip time: 10 ± 0.5 sec. 预热: 150℃, 60sec. 锡炉温度: 260 ± 5 ℃. 时间: 10 ± 0.5 sec 助焊剂: rosin. 
Solderability Test 端面焊锡性	More than 90% of the terminal electrode. Should be covered with solder. 端子电极之锡覆盖面达90%以上。	Preheat: 125 ± 25 ℃, 60sec. Solder: H63A. Solder temperature: 230 ± 5 ℃ Flux for lead free: rosin Dip time: 4 ± 1 sec. 预热: 125 ± 25 ℃, 60sec. 锡炉温度: 230 ± 5 ℃ 时间: 4 ± 1 sec. 助焊剂: rosin. 
High Temperature Resistance Test 高温放置测试	Appearance: no damage. Inductance: within $\pm 20\%$ of initial value NO disconnection or short circuit. 外观不能破损。 电感值: 变异值在初始值20%以内。 电性无短路或断线。	Temperature: 85 ± 5 ℃. Applied current: rated current. Duration: 500 hrs.



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电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

ITEM	Test condition	Test Result
Humidity Resistance Test 高温放置测试	Appearance:no damage. Inductance:within $\pm 20\%$ of initial value NO disconnection or short circuit. 外观不能破损。 电感值: 变异值在初始值20%以内。 电性无短路或断线。	Temperature: $40\pm 2^{\circ}\text{C}$. Applied current:rated current. Duration:500 hrs. Humidity:90~95%.
Thermal shock 热冲击试验	Appearance:no damage. Inductance:within $\pm 20\%$ of initial value NO disconnection or short circuit. 外观不能破损。 电感值: 变异值在初始值20%以内。 电性无短路或断线。	Condition for 1 cycle Step 1:- $25\pm 2^{\circ}\text{C}$, 30 ± 3 min. Step 2:Room temperature within 15 min. Step 3:+ $85\pm 5^{\circ}\text{C}$, 30 ± 3 min. Step 4: Room temperature within 15 min. Number of cycles 50
Humidity Resistance 高湿测试	Appearance:no damage. Inductance:within $\pm 20\%$ of initial value NO disconnection or short circuit. 外观不能破损。 电感值: 变异值在初始值20%以内。 电性无短路或断线	Humidity 90~95%RH. Temperature: $40\pm 5^{\circ}\text{C}$. Applied current:rated current. Duration:500 \pm 12hrs. Measured at room temperature after placing for 2 to 3hrs. 湿度: 90~95%RH. 温度: $40\pm 5^{\circ}\text{C}$. 须加电流: 额定电流。 放置时间: 500 \pm 12hrs. 测试结束于室温放置2~3小时, 始可测试电气特性。