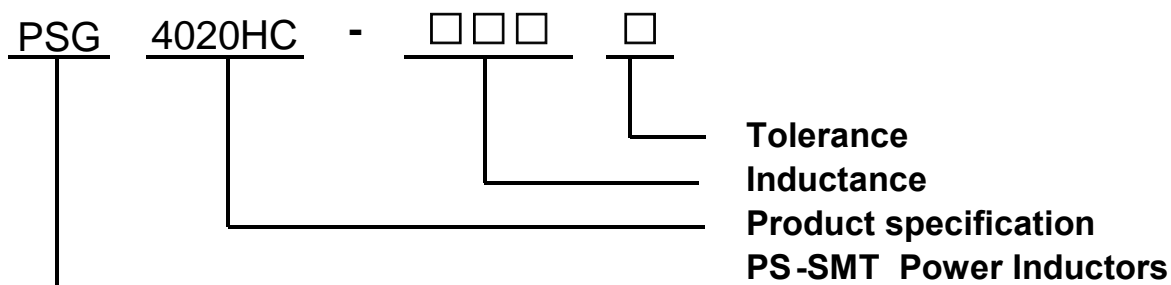


SMT Power Inductors- PSG4020HC

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

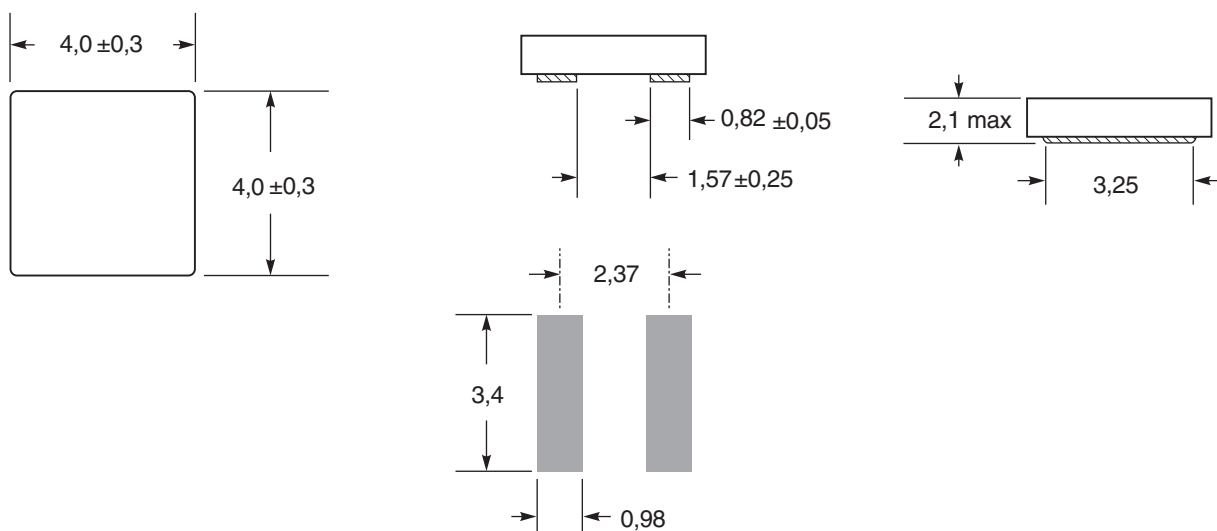
Inductance:

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



推荐焊盘



深圳市富爾電子科技有限公司

ADD: 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- PSG4020HC

规格特性

SPECIFICATIONS

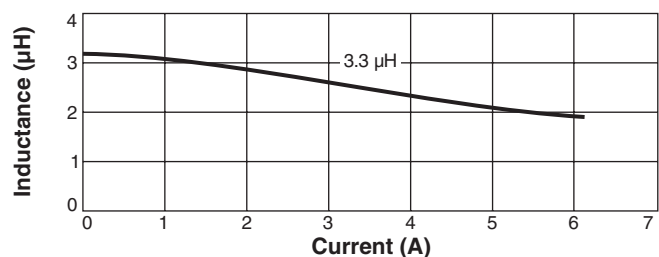
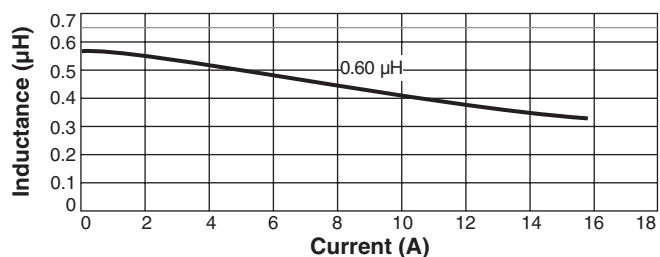
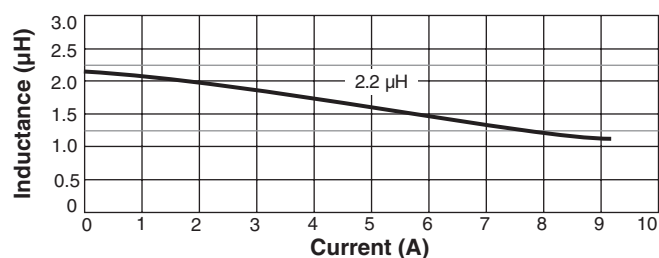
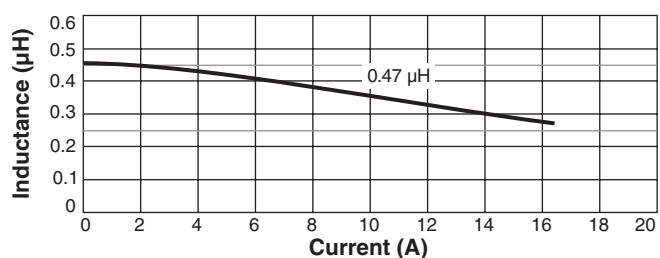
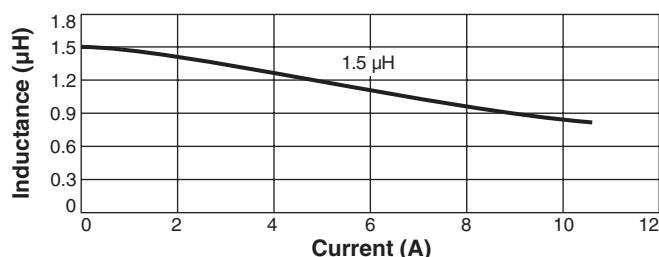
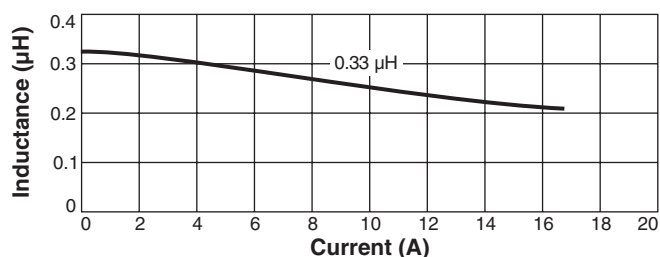
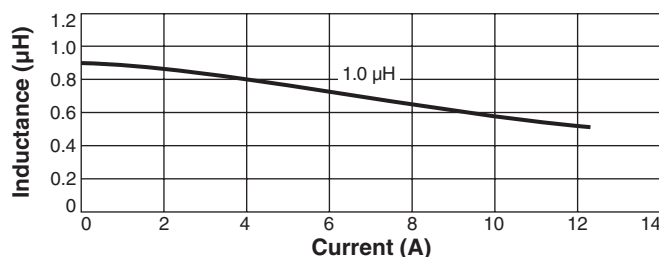
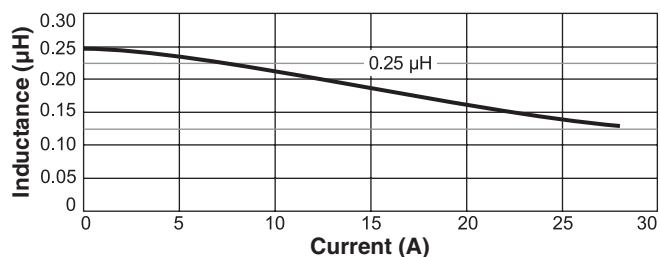
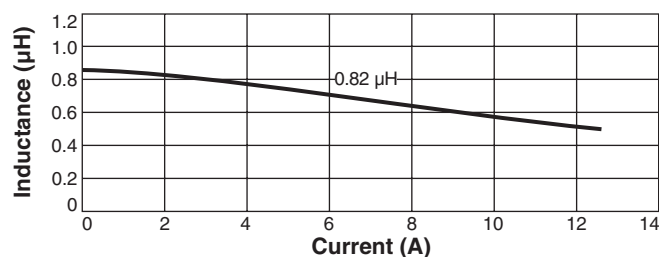
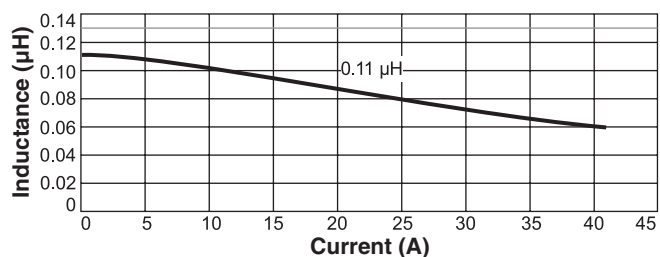
Part number	Inductance (uH)	Percent tolerance	DCR max (mOhms)	SRF typ (MHz)	Isat (A)	Irms(A)	
						20°C rise	40°C rise
PSG4020HC-111M	0.11 @ 1MHZ	20	1.7	250	29.0	20.5	29.0
PSG4020HC-251M	0.25 @ 1MHZ	20	3.0	130	16.5	18.0	24.0
PSG4020HC-331M	0.33 @ 1MHZ	20	3.6	110	15.2	16.5	23.0
PSG4020HC-471M	0.47 @ 1MHZ	20	5.1	95	13.4	14.3	19.7
PSG4020HC-601M	0.60 @ 1MHZ	20	5.9	80	11.7	13.5	18.4
PSG4020HC-821M	0.82 @ 1MHZ	20	8.6	65	9.4	11.2	14.0
PSG4020HC-102M	1.0 @ 1MHZ	20	9.0	60	8.8	8.8	12.0
PSG4020HC-152M	1.5 @ 1MHZ	20	14.3	45	7.5	8.0	11.1
PSG4020HC-222M	2.2 @ 1MHZ	20	21.5	40	6.2	6.7	8.9
PSG4020HC-332M	3.3 @ 1MHZ	20	34.0	30	4.8	4.9	6.6
PSG4020HC-472M	4.7 @ 1MHZ	20	47.3	23	4.1	4.1	5.6
PSG4020HC-562M	5.6 @ 1MHZ	20	53.6	22	3.7	3.9	5.3
PSG4020HC-682M	6.8 @ 1MHZ	20	70.0	21	3.4	3.1	4.2
PSG4020HC-822M	8.2 @ 1MHZ	20	78.1	20	3.2	3.0	4.1

SMT Power Inductors- PSG4020HC

电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

L vs Current

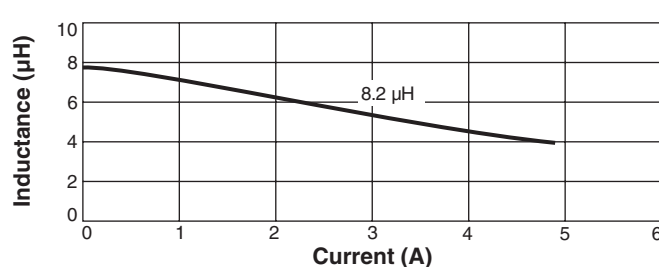
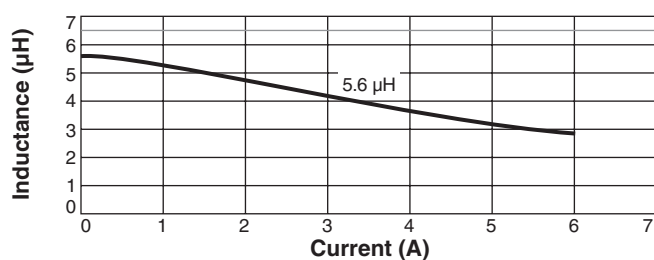
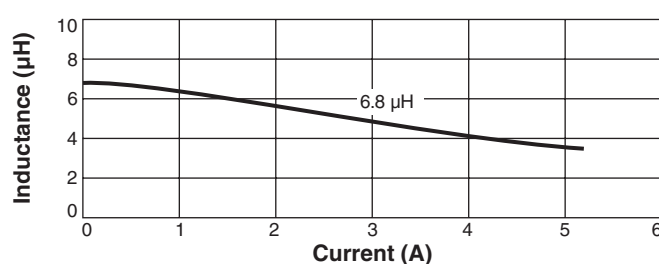
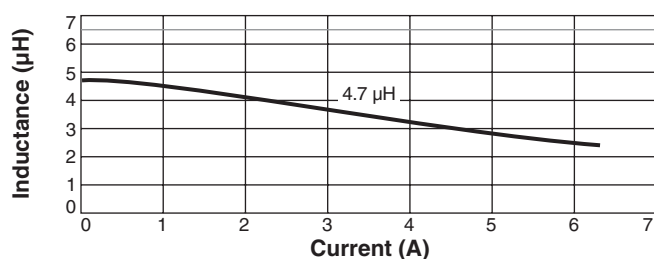


SMT Power Inductors- PSG4020HC

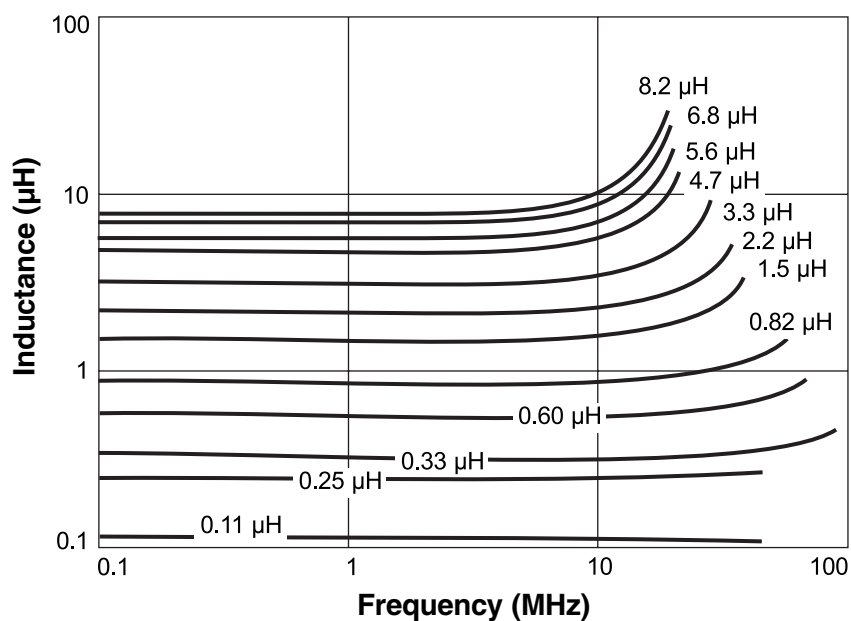
电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

L vs Current



Typical L vs Frequency





深圳市富爾電子科技有限公司

ADD: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

SMT Power Inductors- PSG4020HC

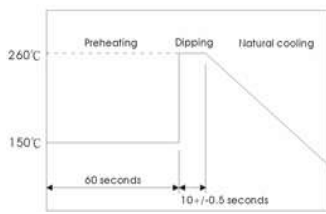
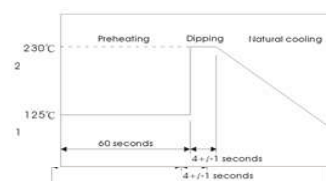
电气特性

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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ADD:深圳市南山區後海工業七路8號

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SMT Power Inductors- PSG4020HC

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 ± 12 hrs. 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 ± 12 hrs. 测试结束于室温放置2~3小时, 始可测试电气特性。