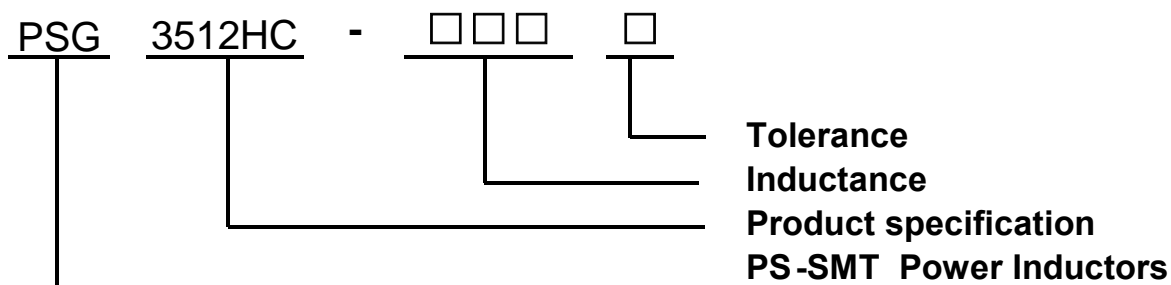


## SMT Power Inductors- PSG3512HC

### 产品型号

### PRODUCT IDENTIFICATION



#### Tolerance:

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

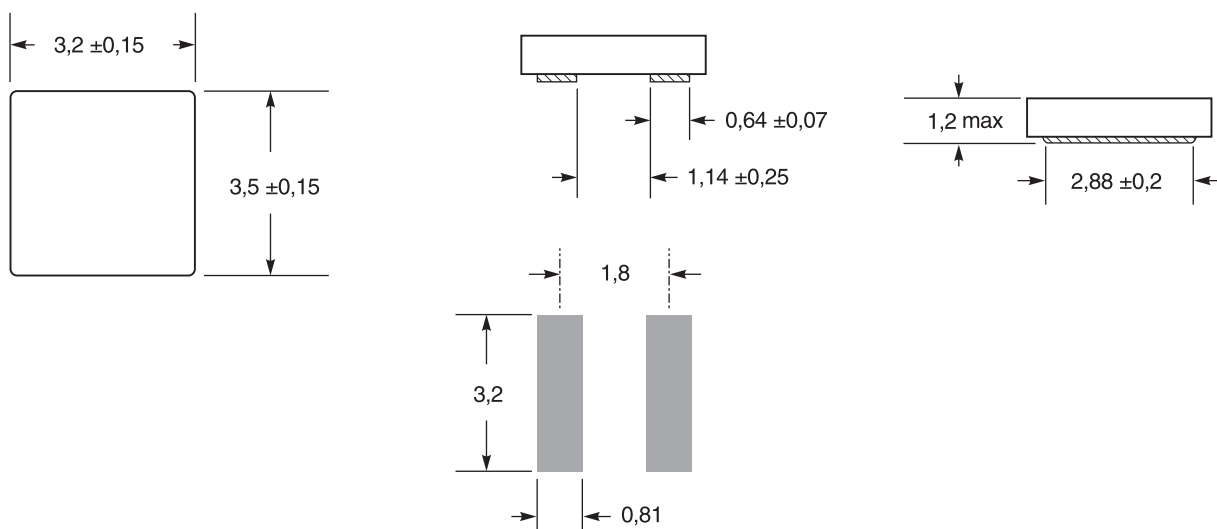
#### Inductance:

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

### 外观尺寸

### SHAPE AND DIMENSIONS

单位 : mm



推荐焊盘



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## SMT Power Inductors- PSG3512HC

### 规格特性

### SPECIFICATIONS

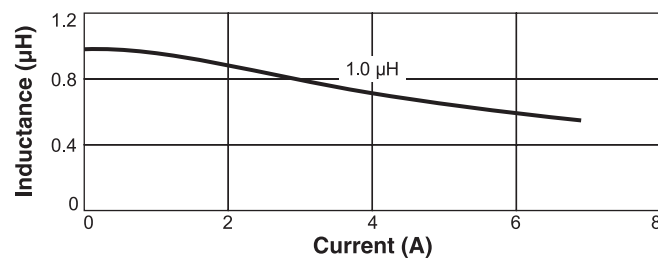
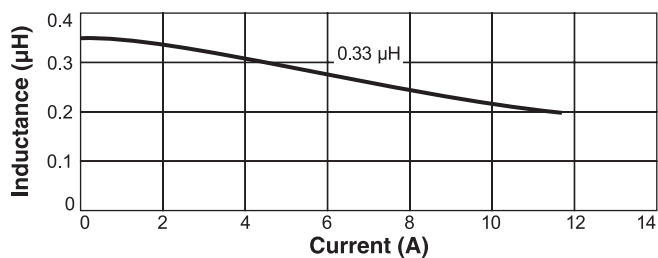
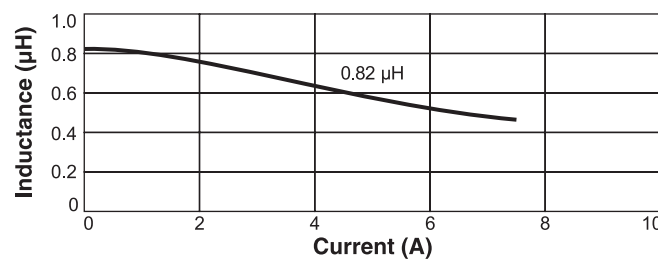
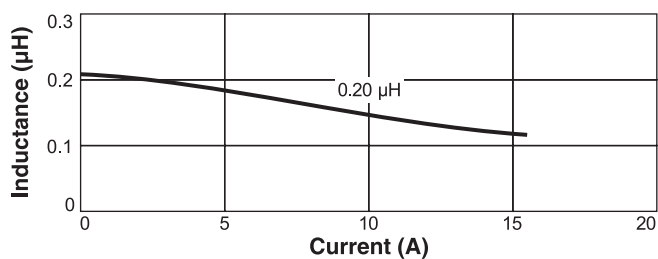
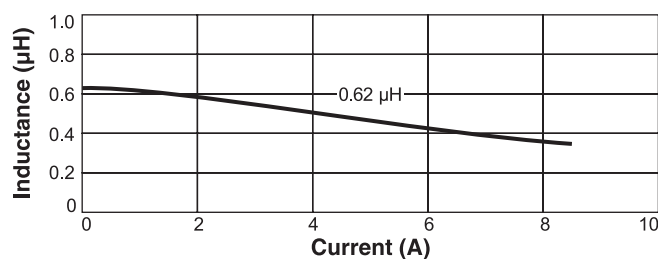
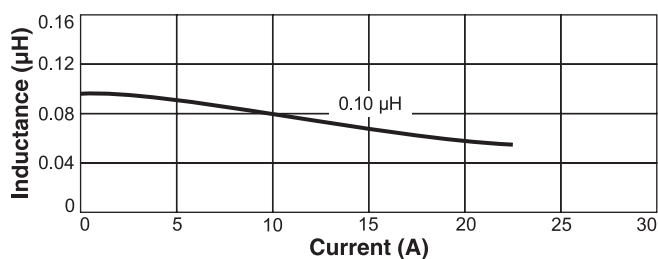
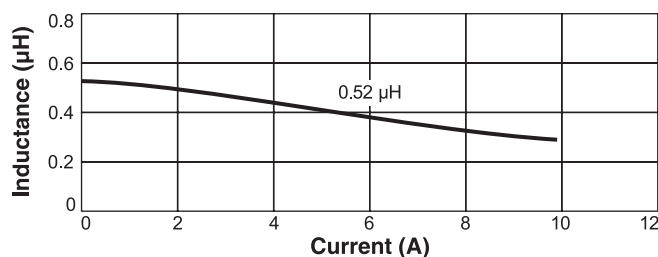
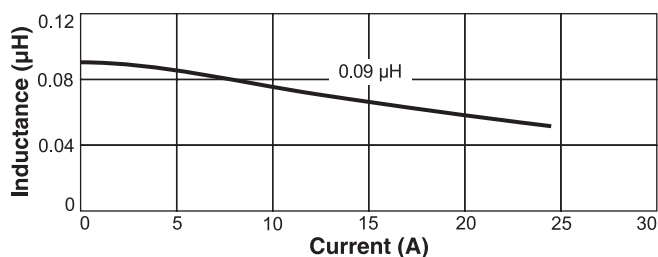
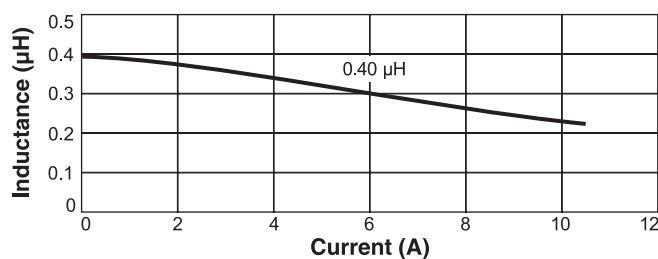
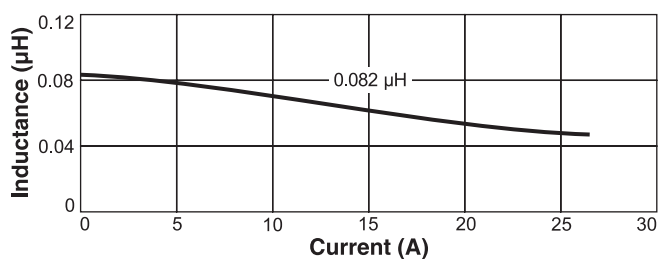
Part number	Inductance (uH)	Percent tolerance	DCR max (mOhms)	SRF typ (MHz)	Isat (A)	Irms(A)	
						20°C rise	40°C rise
PSG3512HC-820M	0.082 @ 1MHZ	20	3.3	340	17.3	15.7	21.2
PSG3512HC-900M	0.090 @ 1MHZ	20	3.8	330	16.4	14.4	19.4
PSG3512HC-101M	0.10 @ 1MHZ	20	4.0	305	15.2	13.5	18.0
PSG3512HC-201M	0.20 @ 1MHZ	20	7.3	175	10.0	11.3	15.2
PSG3512HC-331M	0.33 @ 1MHZ	20	12.5	135	7.8	8.6	11.5
PSG3512HC-401M	0.40 @ 1MHZ	20	14.2	125	7.1	7.7	11.2
PSG3512HC-521M	0.52 @ 1MHZ	20	17.9	105	6.4	7.0	9.4
PSG3512HC-621M	0.62 @ 1MHZ	20	23.8	90	5.7	6.0	8.1
PSG3512HC-821M	0.82 @ 1MHZ	20	28.2	80	5.1	5.6	7.4
PSG3512HC-102M	1.0 @ 1MHZ	20	32.2	70	4.5	4.9	6.6
PSG3512HC-122M	1.2 @ 1MHZ	20	37.4	60	4.1	4.4	5.9

## SMT Power Inductors- PSG3512HC

### 电气特性

### TYPICAL ELECTRICAL CHARACTERISTICS

#### L vs Current





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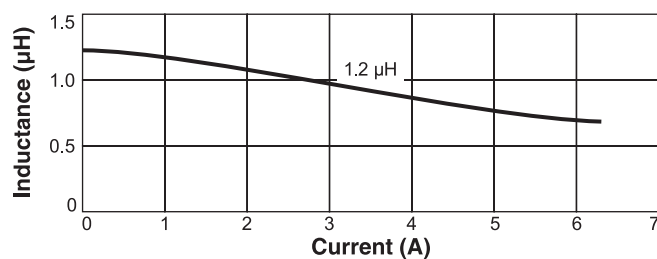
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## SMT Power Inductors- PSG3512HC

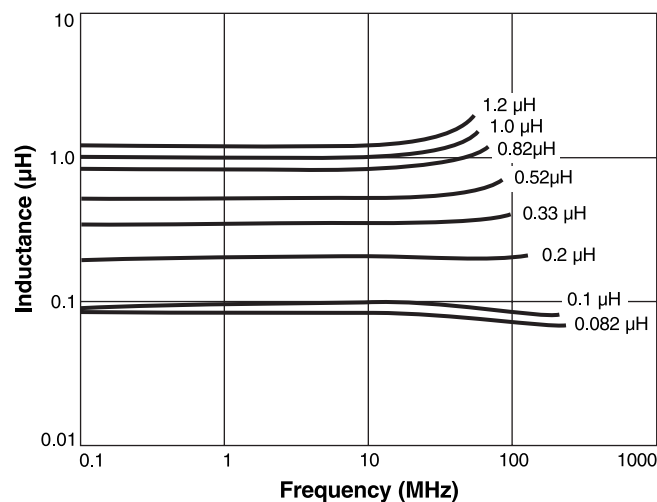
电气特性

### TYPICAL ELECTRICAL CHARACTERISTICS

#### L vs Current



#### Typical L vs Frequency





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## SMT Power Inductors- PSG3512HC

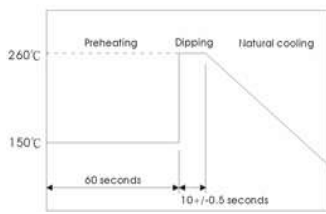
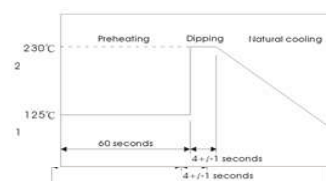
### 电气特性

### 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 ±20%. 外观: 无显著异常。 电感值: 变异性在初始值±20%以内。	Preheat: 150℃, 60sec. Solder: H63A Solder temperature: 260±5℃ Flux for lead free: rosin Dip time: 10±0.5sec. 预热: 150℃, 60sec. 锡炉温度: 260±5℃. 时间: 10±0.5sec 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±1sec. 预热: 125±25℃, 60sec. 锡炉温度: 230±5℃ 时间: 4±1sec. 助焊剂: rosin. 
High Temperature Resistance Test 高温放置测试	Appearance: no damage. Inductance: within ±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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## SMT Power Inductors- PSG3512HC

### 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 $\pm 3$ min. Step 2:Room temperature within 15 min. Step 3:+ $85\pm 5^{\circ}\text{C}$ ,30 $\pm 3$ 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 $\pm 12$ 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 $\pm 12$ hrs. 测试结束于室温放置2~3小时, 始可测试电气特性。