

1W, 1206, LF Type Low Resistance Chip Resistor (Lead / Halogen Free)

1. Scope

This specification applies to 1.6mm x 3.2mm size 1W.

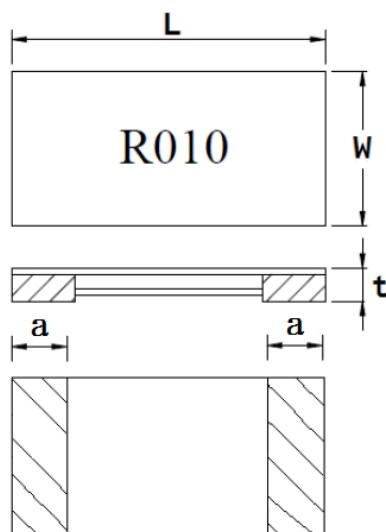
2. Type Designation

SCSF 1206 S 1 -

(1) (2) (3) (4) (5) (6)

- Where
- (1) Series No.
 - (2) Size
1206 = 0.12 x 0.06 (inch)
 - (3) Terminal
S = short terminal
 - (4) Power Rating
1 = 1W
 - (5) Resistance value :
For example :
R001 = 0.001 Ω
R010 = 0.01 Ω
 - (6) Tolerance :
F = ± 1%
G = ± 2%
J = ± 5%

3. Dimensions and schematic



Code	Dimensions (mm)	
Letter	1632	
L	3.2 ± 0.20	
W	1.6 ± 0.20	
a	3mΩ	0.65 ± 0.15
	4~20mΩ	0.50 ± 0.15
t	0.6 ± 0.20	

Note: Marking (No Direction)

Figure 1. Construction and Dimensions

4. Specification

Characteristics	Feature
Power Rating*	1W
Resistance Value	3 ~ 20 mΩ
Temperature Coefficient of Resistance	± 100 ppm/°C
Operation Temperature Range	-55°C ~ +170°C
Resistance Tolerance	± 1% (F), ± 2% (G), ± 5% (J)
Insulation Resistance	Over 100MΩ
Maximum Working Voltage (V)	$(P \cdot R)^{1/2}$

Note * :

Power rating is based on continuous full load operation at rated ambient temperature of 70°C. For resistors operated at ambient temperature in excess of 70°C, the maximum load shall be derated in accordance with the following curve.

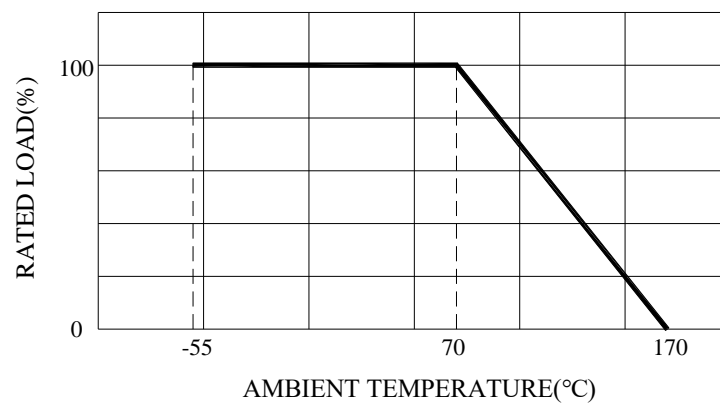


Figure 2. : Power Temperature Derating Curve

5. Reliability Performance

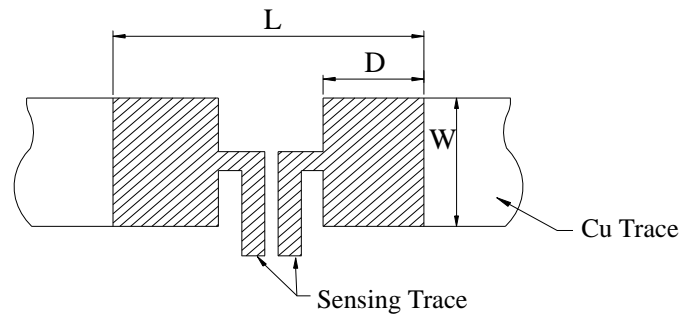
Test Item	Condition of Test	Requirements
Short Time Overload 短时过负荷	2.5 * Rated power for 5 seconds Refer to JIS C 5201-1 4.13 施加 2.5 倍额定电压(但不超过最高过负荷电压), 5s	$\Delta R : \pm 1.0\%$ 外观无损伤, 阻值变化 $\pm 1.0\%$
Thermal Shock 温度冲击	-55 ~125°C 100 cycles, 15 min at each extreme condition Refer to JIS C 5201-1 4.19 -55+/-3 °C to +125+/-3 °C, 驻留时间 15 分钟; 循环 5 次, 最大变化时间 20s ;	$\Delta R : \pm 1.0\%$ 外观无损伤, 阻值变化 $\pm 1.0\%$ 。
Low Temperature Storage	Kept at -55°C, 1,000 hours Refer to JIS C 5201-1 4.23.4	$\Delta R : \pm 0.5\%$
High Temperature Exposure 高温存储	Kept at 170°C for 1,000 hours Refer to JIS C 5201-1 4.23.2 1000 hours at 170 \pm 5°C	$\Delta R : \pm 1.0\%$ 外观无损伤, 阻值变化 $\pm 1.0\%$ 。
Solderability 可焊性	Temperature of Solder : 245 \pm 3°C Immersion Duration : 3 \pm 0.5 second Refer to JIS C 5201-1 4.17 浸入样品在 245+/-3°C 锡槽 3+/-0.5 秒	Uniform coating of solder cover minimum of 95% surface being immersed 外观无损伤, 端头上锡量达到 95%以上
Resistance to Soldering Heat 耐焊接热	Dipped into solder at 270 \pm 5°C for 10 \pm 1 seconds Refer to JIS C 5201-1 4.18 浸入样品在 270 \pm 5°C 锡槽 10 秒, 样品数量 10 片.	$\Delta R : \pm 0.5\%$ 外观无损伤, 阻值变化 $\pm 0.5\%$ 。
Load Life 高温寿命	Rated voltage for 1.5 hours followed by a pause 0.5 hour at 70 \pm 2°C. Cycle repeated 1000 hours Refer to JIS C 5201-1 4.25 70°C, 施加最高工作电压, 1.5h 通电 0.5h 断电, 1000h	$\Delta R : \pm 1.0\%$ 外观无损伤, 阻值变化 $\pm 1.0\%$ 。
Damp Heat with Load 稳态湿热	40 \pm 2°C with relative humidity 90% to 95%. D.C. rated voltage for 1.5 hours ON and 30 minutes OFF. Cycle repeated 1,000 hours Refer to JIS C 5201-1 4.24 40°C/95%R.H, 施加额定工作电压, 1.5h 通电 0.5h 断电, 1000h	$\Delta R : \pm 1.0\%$ 外观无损伤, 阻值变化 $\pm 1.0\%$ 。

Bending Test	Glass-Epoxy board thickness : 1.6mm Bending width : 2mm Between the fulcrums : 90mm Refer to JIS C 5201-1 4.33	$\Delta R : \pm 0.5\%$
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6. Recommended Solder Pad Dimensions

	W (mm)	L (mm)	D (mm)	t (μ m)
1632	1.78	4.14	1.37	105

t: Copper foil minimum thickness of PCB

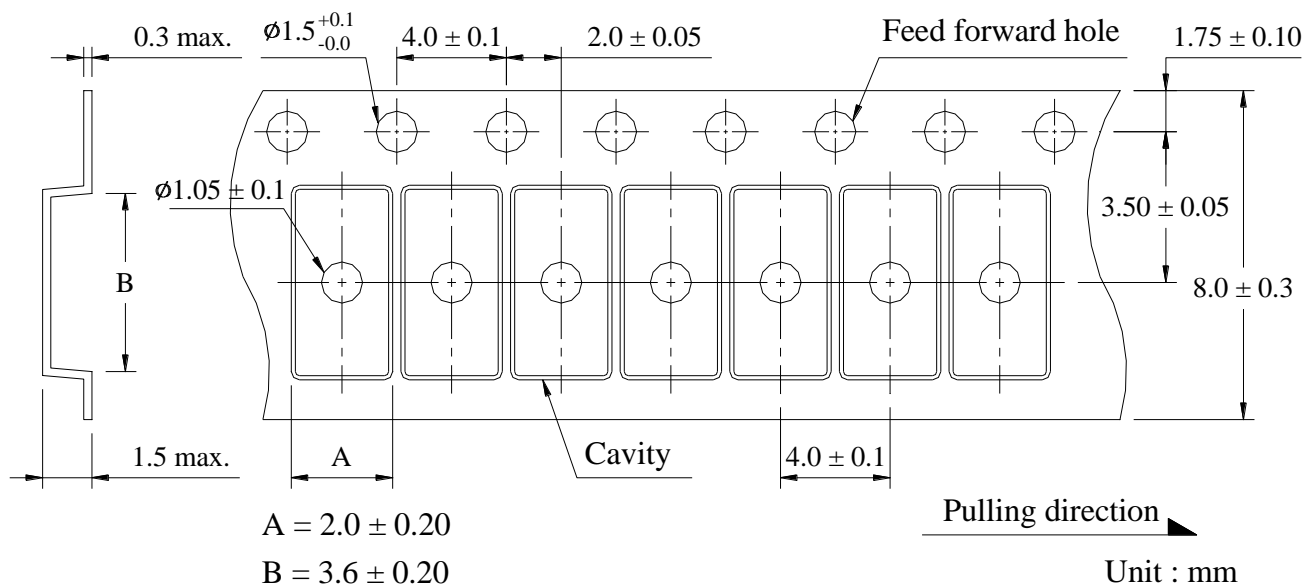


Note: We recommend there is no circuit design between pads to avoid circuit short.

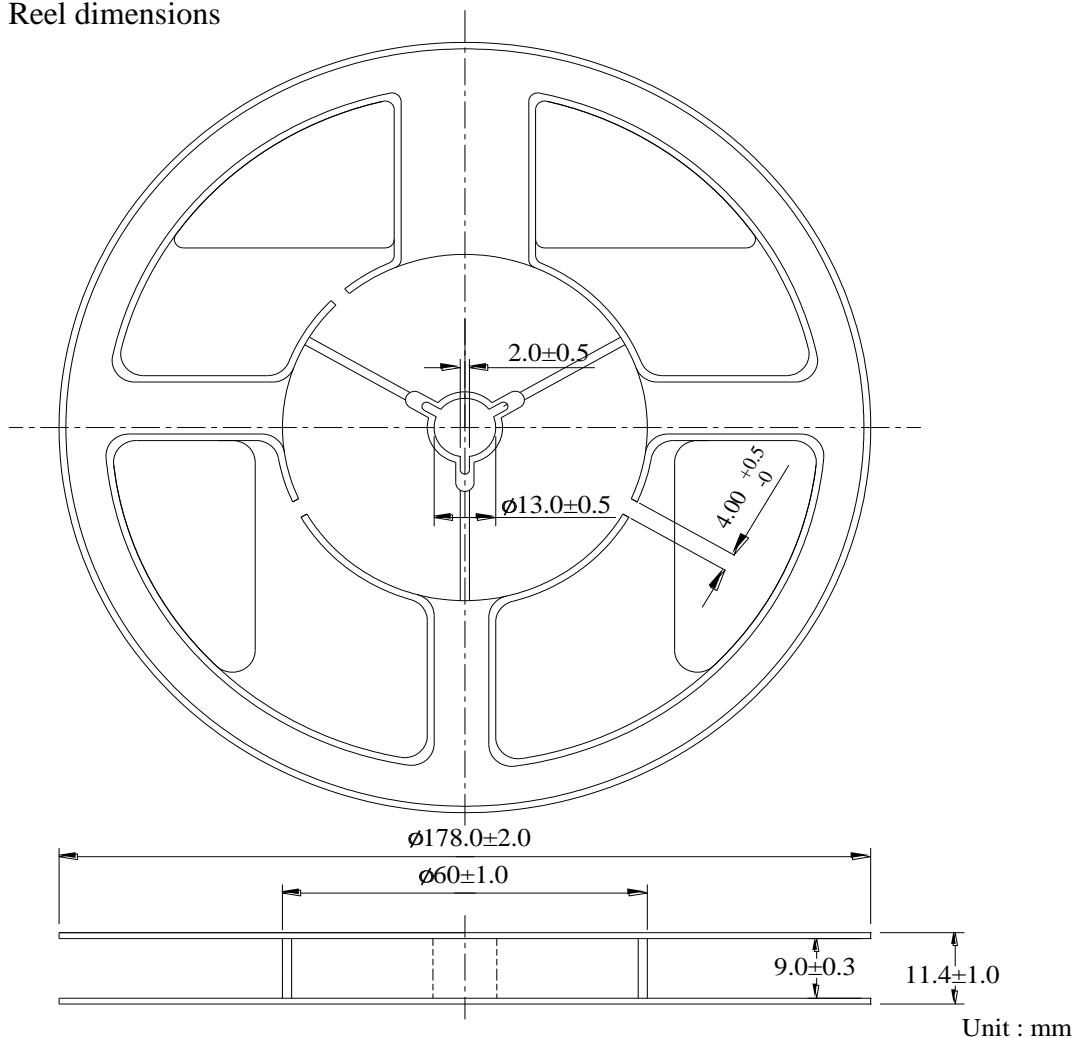
7. Packaging

7-1 Dimensions

7-1-1 Tape packaging dimensions



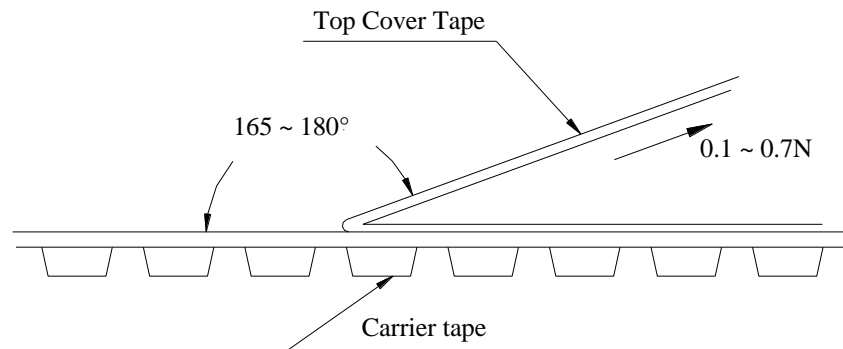
7-1-2 Reel dimensions



7-2 Peel Strength of Top Cover Tape

The peel speed shall be about 300mm/min.

The peel force of top cover tape shall between 0.1 to 0.7N



7-3 Number of Taping

4,000 pieces / reel

7-4 Label marking

The following items shall be marked on the reel.

- (1) Type designation
- (2) Quantity
- (3) Manufacturing date code
- (4) Manufacturer's name
- (5) The country of origin

单击下面可查看定价，库存，交付和生命周期等信息

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