

3264 1W S Type Low Resistance Chip Resistor

1. Scope

This specification applies to 3.2mm x 6.4mm size 1W, fixed metal foil with ceramic carrier current sensing resistors used in electronic equipment.

2. Type Designation

RL-3264-6 - - N
 (1) (2) (3) (4)

Where (1) Series No.

(2) Resistance value :

For example :

R003 = 3mΩ

R050 = 50mΩ

(3) Tolerance :

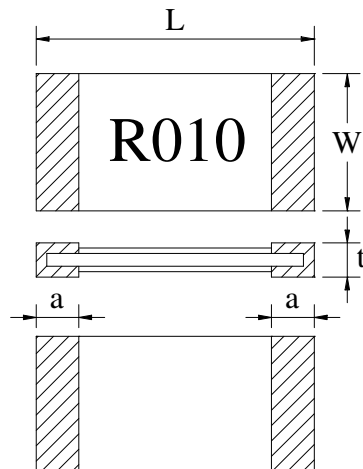
F= ± 1%

G= ± 2%

J= ± 5%

(4) N = Sn plating (Lead free , RoHS compliant)

3. Type Designation



Code Letter	Dimensions (mm)
	RL3264
L	6.35 ± 0.25
W	3.20 ± 0.20
a	1.00 ± 0.15
t	(> 3mΩ) 0.80 ± 0.15 (3mΩ) 0.95 ± 0.15

Figure 1. Construction and Dimensions

4. Specification

Characteristics	Feature	Measurement Method
Power Ratings*	1W	JIS Code 3A/ JIS Code 3D
Resistance Value**	3 ~ 100mΩ	Refer to JIS C 5202 5.1
Temperature Coefficient of Resistance	(≤10mΩ) 100ppm/°C (>10mΩ) 50ppm/°C	Refer to JIS C 5202 5.2
Operation Temperature Range	-55°C ~ +170°C	
Resistance Tolerance	±1% , ±2% , ±5%	JIS C 5201 4.2.4
Insulation Resistance	Over 100MΩ	Refer to JIS C 5202 5.6 Mounting condition G
Maximum Working Voltage (V)	$(P \cdot R)^{1/2}$	

Note * :

Power ratings 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.

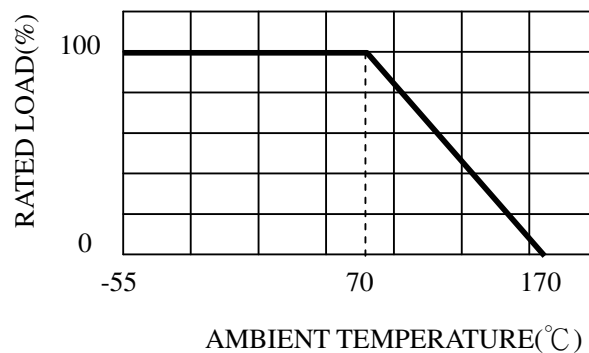


Figure 2. : Power Temperature Derating Curve

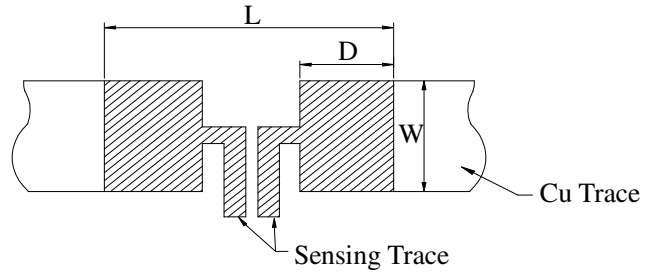
5. Reliability Performance

Test Item	Condition of Test	Requirements
Short Time Overload	2.5 * Rated power for 5 seconds Refer to JIS C 5202 5.5	$\pm 0.5\%$
Thermal Shock	-55 ~ 150℃ 1,000 cycles, 15 min at each extreme condition Refer to JIS C 5202 7.4	$\pm 0.5\%$
Moisture resistance	MIL-STD-202, Method 106	$\pm 0.5\%$
Low Temperature Storage	Kept at -55℃, 1,000 hours Refer to JIS C 5202 7.1	$\pm 0.5\%$
Resistance to Soldering Heat	Dipped into solder at $270 \pm 5^\circ\text{C}$ for 20 ± 1 seconds Refer to JIS C 5202 6.4	$\pm 0.5\%$
Load Life	Rated voltage for 1.5hours followed by a pause 0.5hour at $70 \pm 3^\circ\text{C}$. Cycle repeated 1000 hours Refer to JIS C 5202 7.10	$\pm 1.0\%$
Dump Heat with Load	$60 \pm 2^\circ\text{C}$ with relative humidity 90% to 95%. D.C. rated voltage for 1.5 hours ON 30 minutes OFF. Cycle repeated 1,000 hours Refer to JIS C 5202 7.9	$\pm 0.5\%$
High Temperature Exposure	Kept at 170℃ for 1,000 hours Refer to JIS C 5202 7.11	$\pm 0.5\%$
Solderability	Temperature of Solder : $245 \pm 5^\circ\text{C}$ Immersion Duration : 3 ± 0.5 seconds Refer to JIS C 5202 6.5	Uniform coating of solder cover minimum of 95% surface being immersed
Mechanical Shock	100 G's for 6milliseconds. 5 pulses Refer to JIS C 5202 6.2	$\pm 0.5\%$
Substrate Bending	Glass-Epoxy board thickness : 1.6mm Bending width : 2mm Between the fulcrums : 90mm Refer to JIS C 5202 6.1.4	$\pm 0.5\%$

6. Recommended Solder Pad Dimensions

	W	L	D
3264	4.00	8.00	2.00

Unit : mm

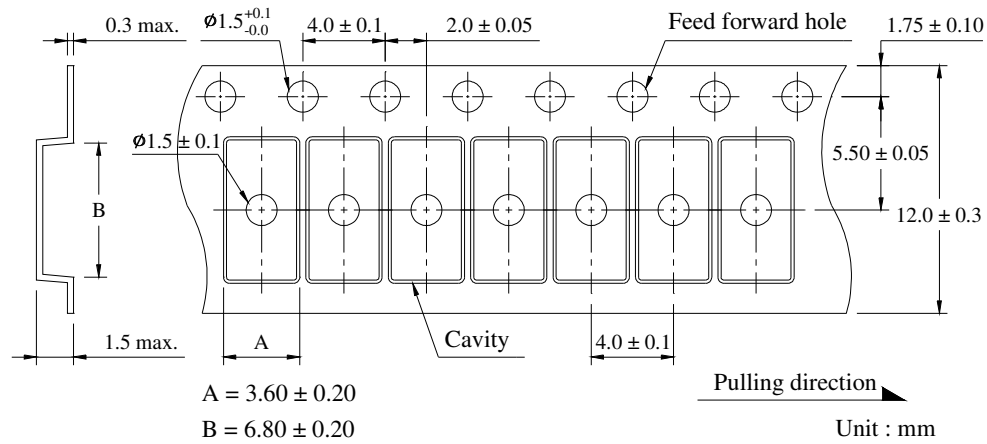


Note : We recommend there is no circuit design between pads to avoid circuit short

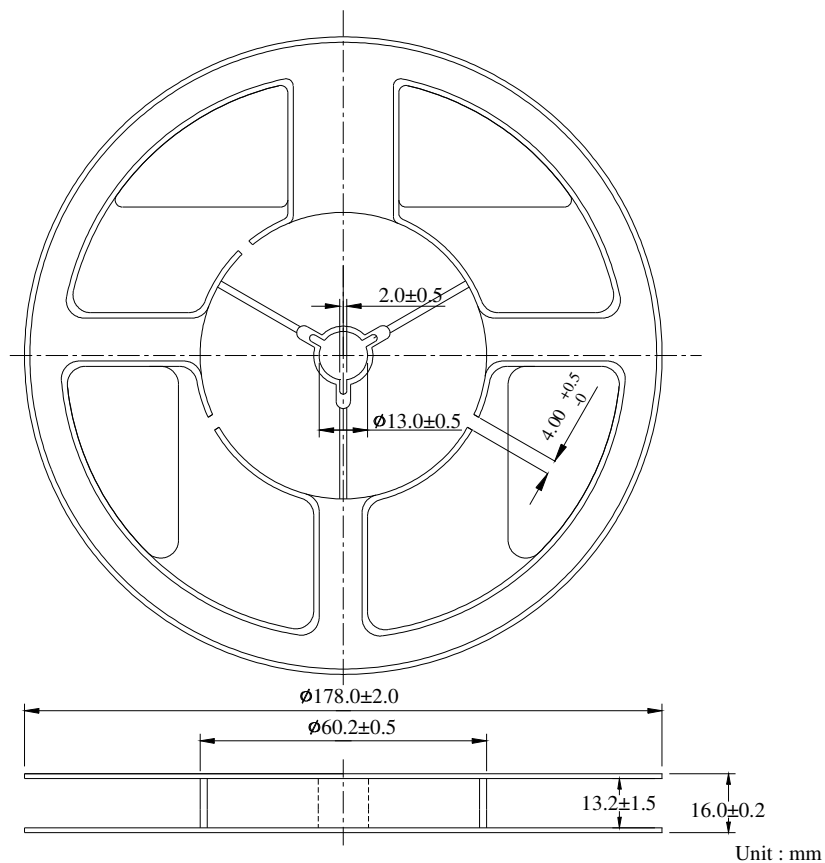
7. Packaging

7-1 Dimensions

7-1-1 Tape packaging dimensions



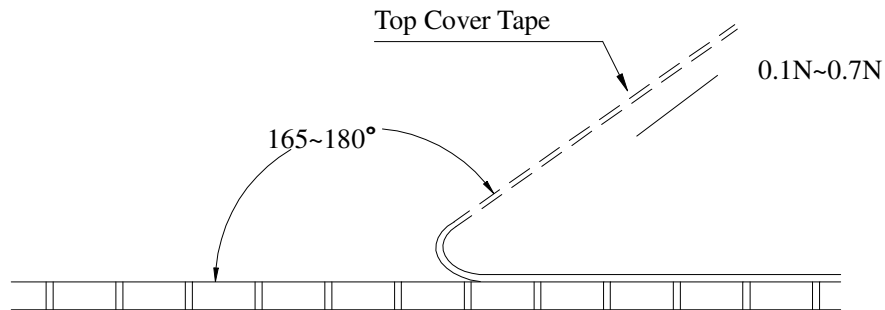
7-1-2 Reel dimensions



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

2,000 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