2W, 2512, 4-Terminal, Low Resistance Chip Resistor (Lead / Halogen Free)

1. Scope

   This specification applies to 3.2mm x 6.4mm size 2W, fixed metal foil with ceramic carrier current sensing resistors used in electronic equipment.

2. Type Designation

   RL3264L4 □ - □□□□ □

   (1) (2) (3) (4)

   Where (1) Series No.

   (2) 9=2W

   (3) Resistance value :

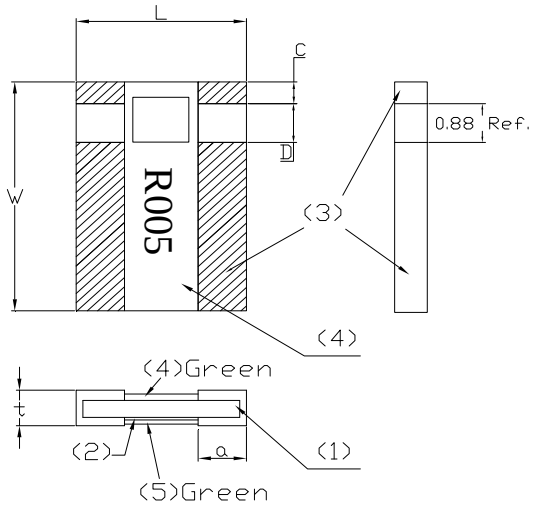
   For example :

   R005 = 5mΩ

   (4) Tolerance :

   F = ± 1%，G = ± 2%，H = ± 3%，J = ± 5%

3. Outline Designation



(1) Substrate: Alumina 96%
(2) Resistor: Cu alloy
(3) Terminals: Sn (on Cu)
(4) Protection coat: Heat resistive epoxy resin(Green)
(5) Protection coat: Heat resistive epoxy resin(Green)

Code Letter	Dimensions (mm)
	3264
L	3.2 ± 0.25
W	6.4 ± 0.25
C	1.2 ± 0.2
D	0.88 ± 0.2
a	0.7 ± 0.2
t	0.9 ± 0.25

Figure 1. Construction and Dimensions

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4. Ratings

4-1 Specification

Power Rating*	2 W		
Resistance Value	1mΩ	3mΩ	5~15mΩ
Temperature Coefficient of Resistance	0~ -400ppm/℃	0~ -250ppm/℃	±150ppm/℃
Resistance Tolerance	± 1%,±2%,±3%,±5%		
Insulation Resistance	Over 100MΩ		
Rated Voltage (V)	$(P*R)^{1/2}$		

Note * :

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

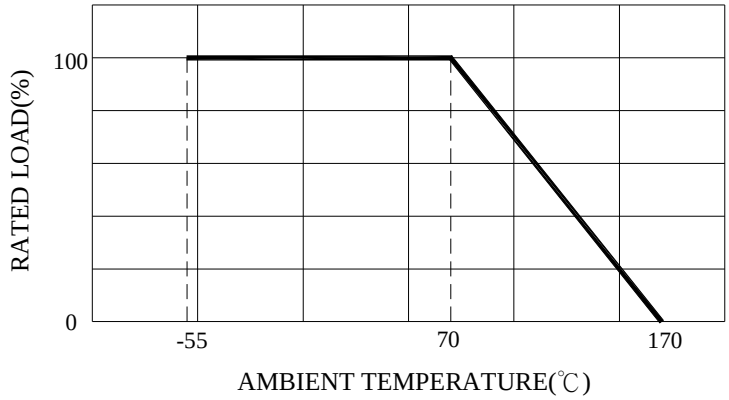

Figure 2.：Power Temperature Derating Curve

4-2 Operation and Storage Temperature Range

-55℃ to +170℃

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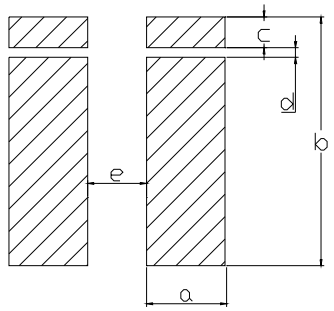
5. Life test

Test Item	Condition of Test	Requirements
Short Time Overload	2.5 * rated power for 5 seconds Refer to JIS C 5201-1 4.13	ΔR : ± 1.0%
Thermal Shock	-55 ~125℃ 100 cycles, 15 min at each extreme condition Refer to JIS C 5201-1 4.19	ΔR : ±1.0%
Low Temperature Storage	Kept at -55℃, 1,000 hours Refer to JIS C 5201-1 4.23.4	ΔR : ± 2.0%
Load Life	Rated voltage for 1.5hours followed by a pause 0.5hour at 70 ± 3℃. Cycle repeated 1000 hours Refer to JIS C 5201-1 4.25	ΔR : ± 2.0%
Damp Heat with Load	40 ± 2℃ with relative humidity 90% to 95%. Cycle repeated 1,000 hours Refer to JIS C 5201-1 4.24	ΔR : ± 2.0%
High Temperature Exposure	Kept at 170℃ for 1,000 hours Refer to JIS C 5201-1 4.23.2	ΔR : ± 2.0%
Solderability	Temperature of Solder : 245 ± 5℃ Immersion Duration : 3 ± 0.5 seconds Refer to JIS C 5201-1 4.17	Uniform coating of solder cover minimum of 95% surface being immersed
Mechanical Shock	100 G's for 6milliseconds. 5 pulses Refer to JIS C 5201-1 4.21	ΔR : ± 1%
Bending Test	Glass-Epoxy board thickness : 1.6mm Bending width : 2mm Between the fulcrums : 90mm Refer to JIS C 5201-1 4.33	ΔR : ± 1%

6. Recommended Solder Pad Dimensions



RL3264L4	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	t (μm)
1~20(mΩ)	1.1	7.34	1.74	0.8	1.8	105

t: Copper foil minimum thickness of PCB

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

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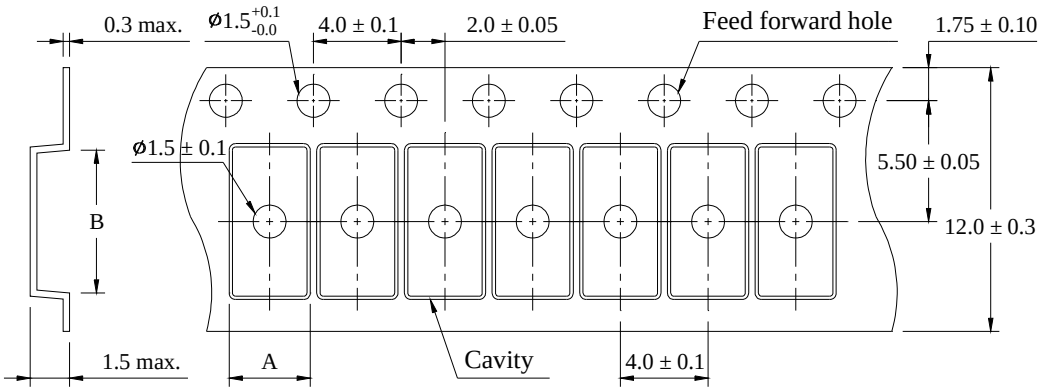
7. Packaging

7-1 Dimensions

7-1-1 Tape packaging dimensions

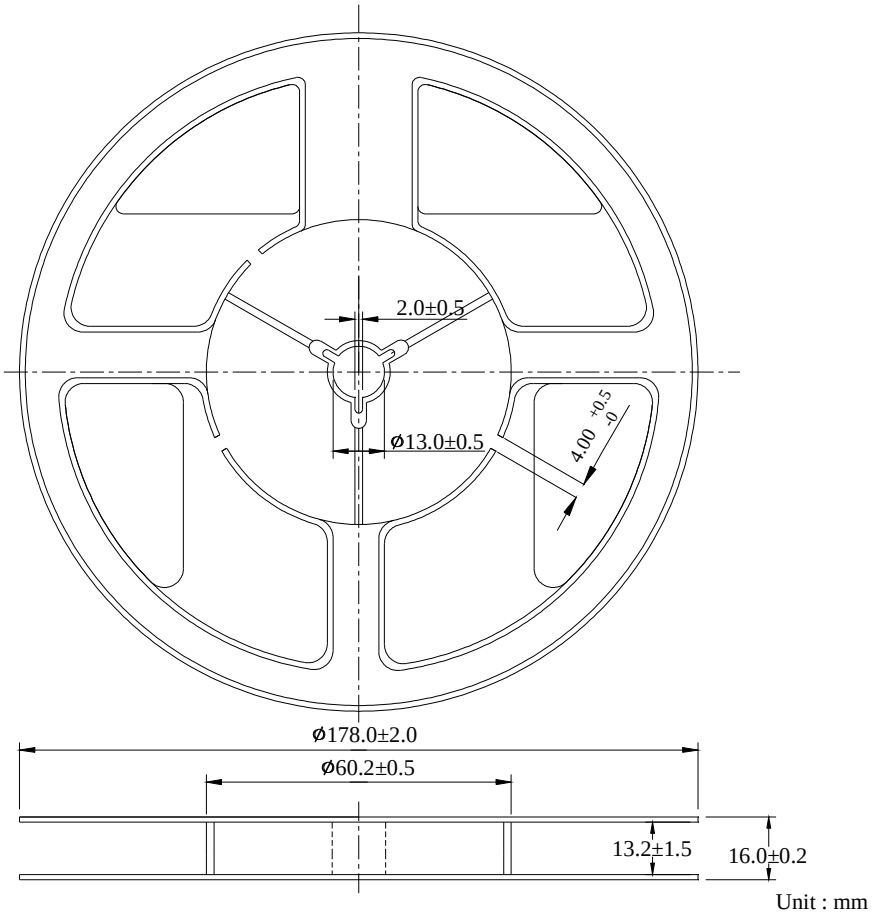


A = 3.60 ± 0.20

B = 6.80 ± 0.20

Unit : mm

7-1-3 Reel dimensions



Unit : mm

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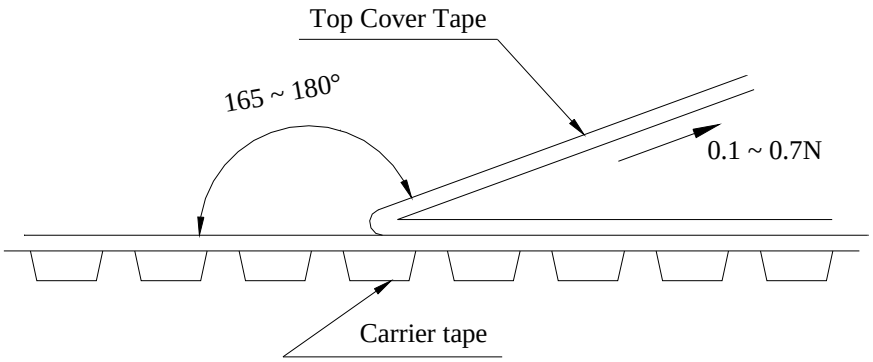
7-2 Peel Strength of Top Cover Tape

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

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