

1W 3264L TYPE Low Resistance Chip Resistor

1. Scope

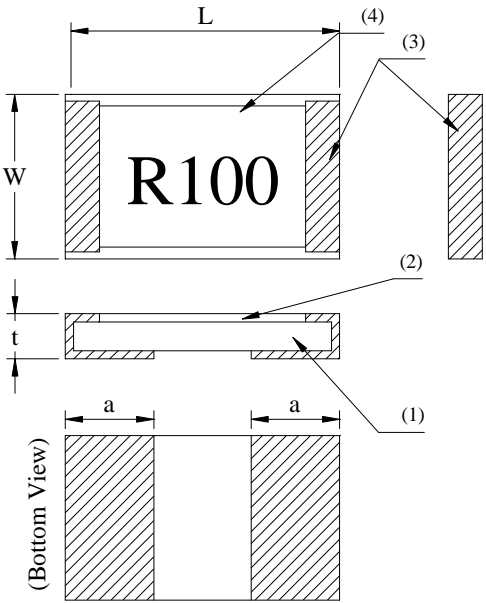
This specification applies to 3.2mm x 6.4mm size 1W, fixed metal film chip resistors rectangular type for use in electronic equipment.

2. Type Designation

RL3264 L - - N
(1) (2) (3) (4) (5)

- Where (1) Series No.
(2) L = L Type
(3) Resistance value :
For example - -
R100 = 100mΩ
2R70 = 2.7Ω
The “ R “ shall be used as a decimal point.
(4) Resistance tolerance: refer to paragraph 4-1.
(5) N = Sn plating (Lead free ,RoHS compliant)

3. Outline Designation



- | | |
|---------------------|----------------------------|
| (1) Substrate | Alumina 96% |
| (2) Resistor | Ni-alloy |
| (3) Terminals | Sn (on Cu) |
| (4) Protection coat | Heat resistive epoxy resin |
| (5) Marking | Epoxy resin |

Code Letter	Dimensions (mm)
	3264L
L	6.4 ± 0.20
W	3.2 ± 0.20
a	2.0 ± 0.15
t	0.5 ± 0.15

Figure 1. Construction and Dimensions

4. Ratings

4-1 Specification

Power Ratings *	1.0 W
Resistance Value	0.1Ω ~ 2.7Ω
Resistance Tolerance	± 1% (F), ± 2% (G)

Note * :
Power ratings 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.

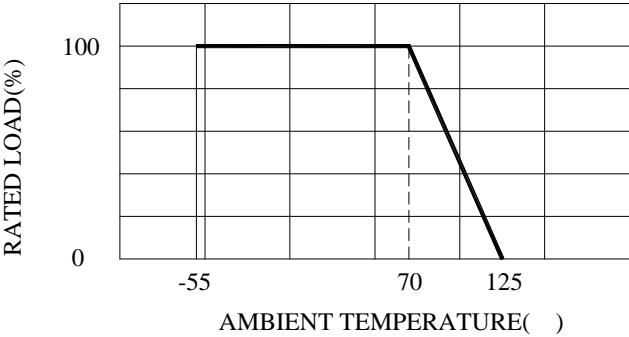


Figure 2. : Power Temperature Derating Cure

4-2 Maximtum over current

$$I = \sqrt{\langle P/R \rangle} [A]/10ms$$

Where

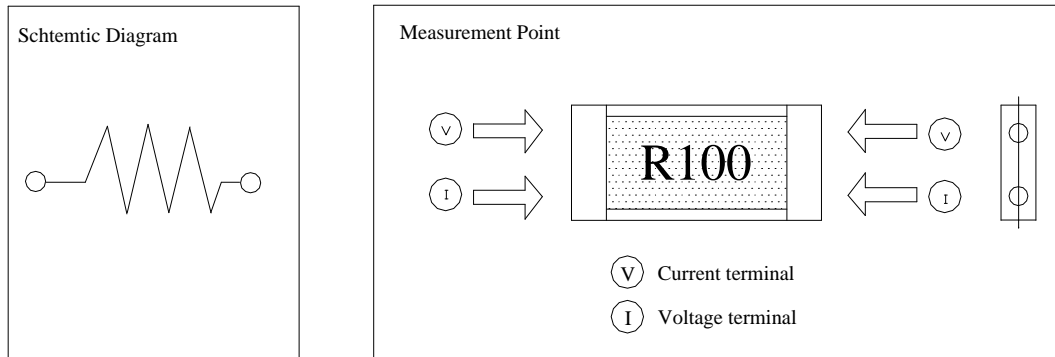
I : maximum current 45A
P : 64W (100mΩ ~ 470mΩ)
32W (560mΩ ~ 2.7Ω)
R : Nominal resistance value (Ω)
Interval 60 seconds minimum

If maximum current so obtained exceed than 45A , use 45A as maximum current.

4-3 Operation and Storage Temperature Range

-55 to +125

5. Schematic Diagram. Measurement Point



6. Life test

6-1 Electrical

6-2-1 Short Time Overload

Resistance Change : $\pm (0.5\% + 0.0005\Omega)$

Without significant damage by flashover (spark, arching), burning or breakdown etc.

Test voltage : 2.5 times the rated voltage.

Duration : 5 seconds

6-2 Mechanical

6-2-1 Solderability

A new uniform coating of solder shall cover minimum of 90% of the surface being immersed.

Temperature of solder : 245 ± 5

Immersion duration : 3 ± 0.5 seconds

6-2-2 Resistance to Soldering Heat

Resistance change : $\pm (0.5\% + 0.0005\Omega)$

Electrical characteristics shall be satisfied.

Without distinct deformation in appearance

Dipped into solder for 10 ± 1 seconds at 270 ± 5

6-2-3 Substrate bending

Resistance change : $\pm (0.5\% + 0.0005\Omega)$

Without mechanical damage such as breaks.

Electrical characteristics shall be satisfied.

Glass-Epoxy bard $t = 1.6\text{mm}$

Bending value : 2mm

Between the fulcrums : 90mm

6-3 Endurance

6-3-1 Rapid change of temperature

Resistance change : $\pm (0.5\% + 0.0005\Omega)$

Without distinct damage.

Perform 5 cycles as follows :

-40 for 30minutes room temperature for 3 minutes

+125 for 30minutes room temperature for 3 minutes

6-3-2 Endurance at 70

Resistance change : $\pm (0.5\% + 0.0005\Omega)$

Without distinct damage.

Rated voltage for 1.5 hours followed by a pause 0.5 hour at a temperature of 70 ± 3 .

Cycle shall be repeated for 1,000 hours.

6-3-3 Dump heat with load

Resistance change : $\pm (0.5\% + 0.0005\Omega)$

The marking shall be legible.

60 ± 2 with relative humidity of 90% to 95%.

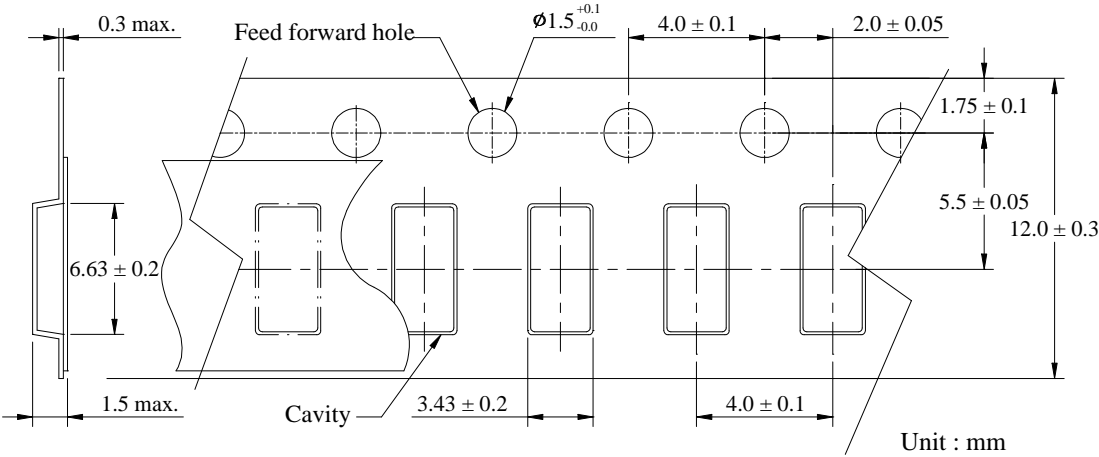
D.C. rated voltage for 1.5 hours ON 30 minutes OFF.

Cycle shall be repeated for 1,000 hours.

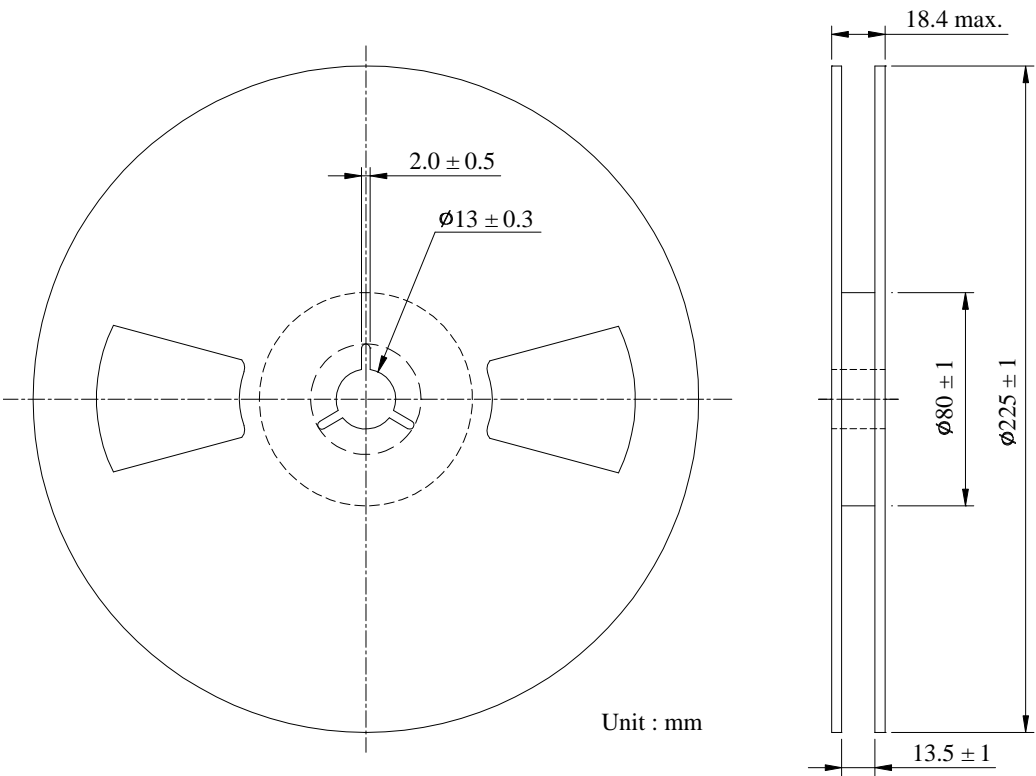
7. Packaging

7-1 Dimensions

7-1-1 Tape packaging dimensions



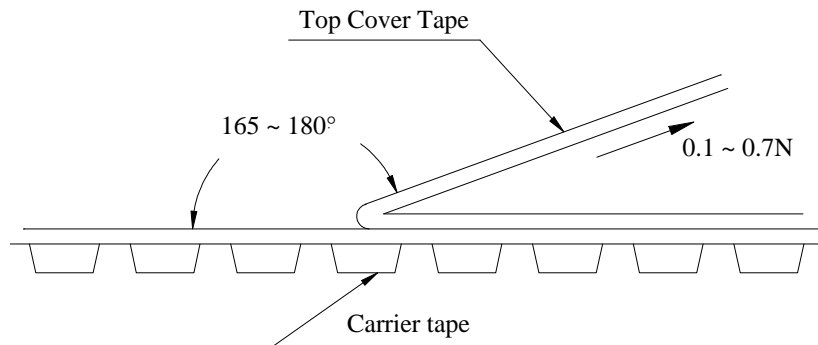
7-1-2 Reel dimensions



7-2 Peel Strength of Top Cover Tape

The peel speed shall be about 300mm/minute

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



7-3 Number of Taping

5,000 pieces / reel

7-4 Label marking

The following items shall be marked on the reel.

- (1) Part number
- (2) Quantity per reel
- (3) Manufacturing month code
- (4) Manufacturer
- (5) Inspection number (Lot number)