Innovative Service Around the Globe YAGEO

# DATA SHEET

## GENERAL PURPOSE CHIP RESISTORS

RC_L series

±0.1%, ±0.5%, ±1%, ±5%

**Sizes 0075/0100/0201/0402/0603/0805/ 1206/1210/1218/2010/2512**

**RoHS compliant & Halogen free**

YAGEO

Product specification – August 02, 2022 V.12

## SCOPE

This specification describes RC series chip resistors with lead free terminations made by thick film process.

## APPLICATIONS

- All general purpose application

## FEATURES

- Halogen Free Epoxy
- RoHS compliant
  - Products with lead free terminations meet RoHS requirements
  - Pb-glass contained in electrodes, resistors element and glass are exempted by RoHS
- Reducing environmentally hazardous wastes
- High component and equipment reliability
- Saving of PCB space
- None forbidden-materials used in products/production
- MSL class: MSL 1

## ORDERING INFORMATION - GLOBAL PART NUMBER

Global part numbers are identified by the series, size, tolerance, packing type, temperature coefficient, taping reel and resistance value.

### GLOBAL PART NUMBER

| RC | XXXX | X | X | X | XX | XXXX | L |
|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |

#### (1) SIZE

0075/0100/0201/0402/0603/0805/1206/1210/1218/2010/2512

#### (2) TOLERANCE

B = ±0.1%

D = ±0.5%

F = ±1.0%

J = ±5.0% (for jumper ordering, use code of J)

#### (3) PACKAGING TYPE

R = Paper taping reel

K = Embossed taping reel

S = ESD safe reel (0075/0100 only)

#### (4) TEMPERATURE COEFFICIENT OF RESISTANCE

– = Based on spec.

#### (5) TAPING REEL & POWER

07 = 7 inch dia. Reel & Standard power

10 = 10 inch dia. Reel

13 = 13 inch dia. Reel

7W = 7 inch dia. Reel & 2 x standard power

7N = 7 inch dia. Reel, ESD safe reel (0075/0100 only)

3W = 13 inch dia. Reel & 2 x standard power

#### (6) RESISTANCE VALUE

There are 2~4 digits indicated the resistance value.

Letter R/K/M is decimal point

Example:

97R6 = 97.6Ω

9K76 = 9760Ω

1M = 1,000,000Ω

#### (7) DEFAULT CODE

Letter L is the system default code for ordering only.(Note)

### ORDERING EXAMPLE

The ordering code for a RC0402 0.0625W chip resistor value 100KΩ with ±5% tolerance, supplied in 7-inch tape reel of 10,000 units per reel is: RC0402JR-07100KL.

**NOTE**

1. All our RSMD products meet RoHS compliant and Halogen Free. "LFP" of the internal 2D reel label mentions "Lead Free Process".
2. On customized label, "LFP" or specific symbol can be printed.

## MARKING

### RC0075 / RC0100 / RC0201 / RC0402

Fig. 1

No Marking

### RC0603

Fig. 2 $240 = 24 \times 10^0 = 24$

1%, 0.5%,E24 exception values 10/11/13/15/20/75 of E24 series

Fig. 3 $88A = 806 \times 10^0 = 806\ \Omega$

1%, 0.5%, E96 refer to EIA-96 marking method, including values 10/11/13/15/20/75 of E24 series

Fig. 4 Value = 10 KΩ

5%, E24 series : 3 digits
First two digits for significant figure and 3rd digit for number of zeros

### RC0805 / RC1206 / RC1210 / RC2010 / RC2512

Fig. 5 Value = 10 KΩ

1%, 0.5%, E24/E96 series : 4 digits
First three digits for significant figure and 4th digit for number of zeros

Fig. 6 Value = 10 KΩ

5%, E24 series : 3 digits
First two digits for significant figure and 3rd digit for number of zeros

### RC1218

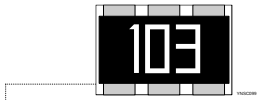


Fig. 7 Value = 10 KΩ

E-24 series: 3 digits, ±5%
First two digits for significant figure and 3rd digit for number of zeros

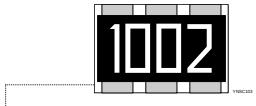


Fig. 8 Value = 10 KΩ

Both E-24 and E-96 series: 4 digits, ±1% & ±0.5%
First three digits for significant figure and 4th digit for number of zeros

For further marking information, please see special data sheet "Chip resistors marking".

## CONSTRUCTION

The resistor is constructed on top of a high-grade ceramic body. Internal metal electrodes are added on each end to make the contacts to the thick film resistive element. The composition of the resistive element is a noble metal imbedded into a glass and covered by a second glass to prevent environmental influences. The resistor is laser trimmed to the rated resistance value. The resistor is covered with a protective epoxy coat, finally the two external terminations (matte tin on Ni-barrier) are added, as shown in Fig.9.

### Outlines

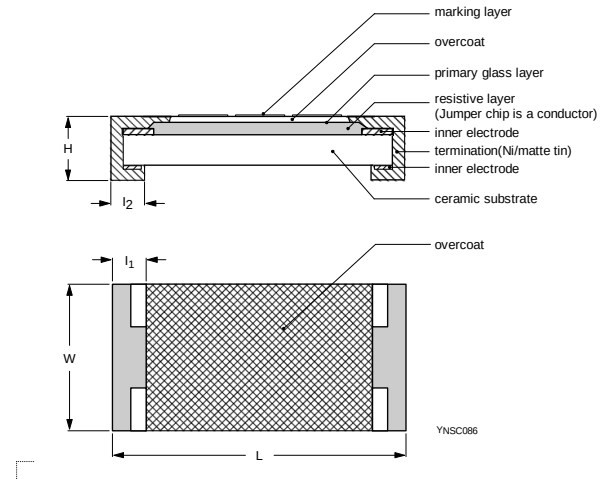


Fig. 9 Chip resistor outlines

## DIMENSION

Table 1

| TYPE | L (mm) | W (mm) | H (mm) | $l_1$ (mm) | $l_2$ (mm) |
|---|---|---|---|---|---|
| RC0075 | 0.30±0.01 | 0.15±0.01 | 0.13±0.01 | 0.08±0.03 | 0.08±0.03 |
| RC0100 | 0.40±0.02 | 0.20±0.02 | 0.13±0.02 | 0.10±0.03 | 0.10±0.03 |
| RC0201 | 0.60±0.03 | 0.30±0.03 | 0.23±0.03 | 0.10±0.05 | 0.15±0.05 |
| RC0402 | 1.00±0.05 | 0.50±0.05 | 0.35±0.05 | 0.20±0.10 | 0.25±0.10 |
| RC0603 | 1.60±0.10 | 0.80±0.10 | 0.45±0.10 | 0.25±0.15 | 0.25±0.15 |
| RC0805 | 2.00±0.10 | 1.25±0.10 | 0.50±0.10 | 0.35±0.20 | 0.35±0.20 |
| RC1206 | 3.10±0.10 | 1.60±0.10 | 0.55±0.10 | 0.45±0.20 | 0.45±0.20 |
| RC1210 | 3.10±0.10 | 2.60±0.15 | 0.55±0.10 | 0.45±0.15 | 0.50±0.20 |
| RC1218 | 3.10±0.10 | 4.60±0.10 | 0.55±0.10 | 0.45±0.20 | 0.40±0.20 |
| RC2010 | 5.00±0.10 | 2.50±0.15 | 0.55±0.10 | 0.60±0.20 | 0.55±0.20 |
| RC2512 | 6.35±0.10 | 3.10±0.15 | 0.55±0.10 | 0.60±0.20 | 0.60±0.20 |

## ELECTRICAL CHARACTERISTICS

Table 2

| CHARAC-TERISTICS | POWER | OPERATING TEMPERATURE RANGE | MAXIMUM WORKING VOLTAGE | MAXIMUM OVERLOAD VOLTAGE | DIELECTRIC WITHSTANDING VOLTAGE | RESISTANCE RANGE | TEMPERATURE COEFFICIENT | JUMPER CRITERIA |
|---|---|---|---|---|---|---|---|---|
| RC0075 | 1/50 W | -55℃ to 125℃ | 10V | 25V | 25V | 5% (E24)<br>10Ω≦R≦1MΩ<br>1% (E24/E96)<br>10Ω≦R≦1MΩ<br>Jumper<50mΩ | 10Ω≦R<100Ω<br>-200~+600ppm℃<br>100Ω≦R≦1MΩ<br>±200ppm℃ | Rated Current<br>0.5A<br>Maximum<br>Current<br>1.0A |
| RC0100 | 1/32 W | -55℃ to 125℃ | 15V | 30V | 30V | 5% (E24)<br>1Ω≦R≦22MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.5% (E24/E96)<br>33Ω≦R≦470KΩ<br>Jumper<50mΩ | 1Ω≦R<10Ω<br>-200~+600ppm℃<br>10Ω≤ R < 100Ω:<br>±300ppm/°C<br>100Ω≤ R ≤ 10MΩ:<br>±200ppm/°C<br>10MΩ< R ≤<br>22MΩ:<br>±250ppm/°C | Rated Current<br>0.5A<br>Maximum<br>Current<br>1.0A |

Table 2

| CHARAC-TERISTICS | POWER | OPERATING TEMPERATURE RANGE | MAXIMUM WORKING VOLTAGE | MAXIMUM OVERLOAD VOLTAGE | DIELECTRIC WITHSTANDING VOLTAGE | RESISTANCE RANGE | TEMPERATURE COEFFICIENT | JUMPER CRITERIA |
|---|---|---|---|---|---|---|---|---|
| RC0201 | 1/20 W | -55℃ to 125℃ | 25V | 50V | 50V | 5% (E24)<br>1Ω≦R≦10MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.5% (E24/E96)<br>1Ω≦R≦1MΩ<br>0.1% (E24/E96)<br>10Ω≦R≦1MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>-100~+350ppm/℃<br>10Ω<R≦10MΩ<br>±200ppm/℃ | Rated Current<br>0.5A<br>Maximum<br>Current<br>1.0A |
| RC0402 | 1/16 W | -55℃ to 155℃ | 50V | 100V | 100V | 5% (E24)<br>1Ω≦R≦22MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.5% (E24/E96)<br>1Ω≦R≦1MΩ<br>0.1% (E24/E96)<br>10Ω≦R≦1MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>±200ppm/℃<br>10Ω<R≦10MΩ<br>±100ppm/℃<br>10MΩ<R≦22MΩ<br>±200ppm/℃ | Rated Current<br>1.0A<br>Maximum<br>Current<br>2.0A |
| | 1/8W | -55℃ to 155℃ | 50V | 100V | 100V | 5% (E24)<br>1Ω≦R≦1MΩ<br>1% (E24/E96)<br>1Ω≦R≦1MΩ | 1Ω≦R≦1MΩ<br>±200ppm/℃ | |
| RC0603 | 1/10 W | -55℃ to 155℃ | 75V | 150V | 150V | 5% (E24)<br>1Ω≦R≦22MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.5% (E24/E96)<br>1Ω≦R≦1MΩ<br>0.1% (E24/E96)<br>10Ω≦R≦1MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>±200ppm/℃<br>10Ω<R≦10MΩ<br>±100ppm/℃<br>10MΩ<R≦22MΩ<br>±200ppm/℃ | Rated Current<br>1.0A<br>Maximum<br>Current<br>2.0A |
| | 1/5 W | -55℃ to 155℃ | 75V | 150V | 150V | 5% (E24)<br>1Ω≦R≦1MΩ<br>1% (E24/E96)<br>1Ω≦R≦1MΩ | 1Ω≦R≦1MΩ<br>±200ppm/℃ | |
| RC0805 | 1/8 W | -55℃ to 155℃ | 150V | 300V | 300V | 5% (E24)<br>1Ω≦R≦100MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.5% (E24/E96)<br>1Ω≦R≦1MΩ<br>0.1% (E24/E96)<br>10Ω≦R≦1MΩ<br>10%, 20% (E24)<br>24MΩ≦R≦100MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>±200ppm/℃<br>10Ω<R≦10MΩ<br>±100ppm/℃<br>10MΩ<R≦22MΩ<br>±200ppm/℃<br>24MΩ<R≦<br>100MΩ<br>±300ppm/℃ | Rated Current<br>2.0A<br>Maximum<br>Current<br>5.0A |
| | 1/4 W | -55℃ to 155℃ | 150V | 300V | 300V | 5% (E24)<br>1Ω≦R≦1MΩ<br>1% (E24/E96)<br>1Ω≦R≦1MΩ | 1Ω≦R≦1MΩ<br>±200ppm/℃ | |

## FOOTPRINT AND SOLDERING PROFILES

For recommended footprint and soldering profiles, please refer to data sheet "Chip resistors mounting"

Table 3

| CHARAC-TERISTICS | POWER | OPERATING TEMPERATURE RANGE | MAXIMUM WORKING VOLTAGE | MAXIMUM OVERLOAD VOLTAGE | DIELECTRIC WITHSTANDING VOLTAGE | RESISTANCE RANGE | TEMPERATURE COEFFICIENT | JUMPER CRITERIA |
|---|---|---|---|---|---|---|---|---|
| RC1206 | 1/4 W | -55℃ to 155℃ | 200V | 400V | 500V | 5% (E24)<br>1Ω≦R≦100MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.5% (E24/E96)<br>1Ω≦R≦1MΩ<br>0.1% (E24/E96)<br>10Ω≦R≦1MΩ<br>10%, 20% (E24)<br>24MΩ≦R≦100MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>±200ppm/℃<br>10Ω<R≦10MΩ<br>±100ppm/℃<br>10MΩ<R≦22MΩ<br>±200ppm/℃<br>24MΩ≦R≦<br>100MΩ<br>±300ppm/℃ | Rated Current<br>2.0A<br>Maximum<br>Current<br>10.0A |
| | 1/2 W | -55℃ to 155℃ | 200V | 400V | 500V | 5% (E24)<br>1Ω≦R≦1MΩ<br>1% (E24/E96)<br>1Ω≦R≦1MΩ | 1Ω≦R≦1MΩ<br>±200ppm/℃ | |
| RC1210 | 1/2 W | -55℃ to 155℃ | 200V | 500V | 500V | 5% (E24)<br>1Ω≦R≦22MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.1%, 0.5% (E24/E96)<br>10Ω≦R≦1MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>±200ppm/℃<br>10Ω<R≦10MΩ<br>±100ppm/℃<br>10MΩ<R≦22MΩ<br>±200ppm/℃ | Rated Current<br>2.0A<br>Maximum<br>Current<br>10.0A |
| RC1218 | 1 W | -55℃ to 155℃ | 200V | 500V | 500V | 5% (E24)<br>1Ω≦R≦1MΩ<br>1% (E24/E96)<br>1Ω≦R≦1MΩ<br>0.1%, 0.5% (E24/E96)<br>10Ω≦R≦1MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>±200ppm/℃<br>10Ω<R≦1MΩ<br>±100ppm/℃ | Rated Current<br>6.0A<br>Maximum<br>Current<br>10.0A |
| RC2010 | 3/4 W | -55℃ to 155℃ | 200V | 500V | 500V | 5% (E24)<br>1Ω≦R≦22MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.1%, 0.5% (E24/E96)<br>10Ω≦R≦1MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>±200ppm/℃<br>10Ω<R≦10MΩ<br>±100ppm/℃<br>10MΩ<R≦22MΩ<br>±200ppm/℃ | Rated Current<br>2.0A<br>Maximum<br>Current<br>10.0A |
| RC2512 | 1 W | -55℃ to 155℃ | 200V | 500V | 500V | 5% (E24)<br>1Ω≦R≦22MΩ<br>1% (E24/E96)<br>1Ω≦R≦10MΩ<br>0.1%, 0.5% (E24/E96)<br>10Ω≦R≦1MΩ<br>Jumper<50mΩ | 1Ω≦R≦10Ω<br>±200ppm/℃<br>10Ω<R≦10MΩ<br>±100ppm/℃<br>10MΩ<R≦22MΩ<br>±200ppm/℃ | Rated Current<br>2.0A<br>Maximum<br>Current<br>10.0A |
| | 2 W | -55℃ to 155℃ | 200V | 400V | 500V | 5% (E24)<br>1Ω≦R≦1MΩ<br>1% (E24/E96)<br>1Ω≦R≦1MΩ | 1Ω≦R≦1MΩ<br>±200ppm/℃ | |

## PACKING STYLE AND PACKAGING QUANTITY

Table 4 Packing style and packaging quantity

| PACKING STYLE | PAPER TAPING REEL (R) | | | ESD SAFE REEL (S) (4MM WIDTH, 1MM PITCH PLASTIC EMBOSSED) | EMBOSSED TAPING REEL | |
|---|---|---|---|---|---|---|
| REEL DIMENSION | 7" (178 mm) | 10" (254mm) | 13" (330 mm) | 7" (178 mm) | 7" (178 mm) | 13" (330 mm) |
| RC0075 | --- | --- | --- | 20000 | --- | --- |
| RC0100 | 20000 | --- | 80000 | 40000 | --- | --- |
| RC0201 | 10000 | 20000 | 50000 | --- | --- | --- |
| RC0402 | 10000 | 20000 | 50000 | --- | --- | --- |
| RC0603 | 5000 | 10000 | 20000 | --- | --- | --- |
| RC0805 | 5000 | 10000 | 20000 | --- | --- | --- |
| RC1206 | 5000 | 10000 | 20000 | --- | --- | --- |
| RC1210 | 5000 | 10000 | 20000 | --- | --- | --- |
| RC1218 | --- | --- | --- | --- | 4000 | --- |
| RC2010 | --- | --- | --- | --- | 4000 | 16000 |
| RC2512 | --- | --- | --- | --- | 4000 | --- |

**NOTE**
For tape and reel specification/dimensions, please refer to data sheet "Chip resistors packing".

## FUNCTIONAL DESCRIPTION

### OPERATING TEMPERATURE RANGE

RC0402 to RC2512 Range: -55˚C to +155˚C (Fig. 10-1)

RC0075 to RC0201 Range: -55˚C to +125˚C (Fig. 10-2)

### POWER RATING

Each type rated power at 70˚C:

RC0075=1/50W
RC0100=1/32W
RC0201=1/20W
RC0402=1/16W, 1/8W
RC0603=1/10W, 1/5W
RC0805=1/8W, 1/4W
RC1206=1/4W, 1/2W
RC1210=1/2W
RC1218=1W
RC2010=3/4W
RC2512=1W, 2W

### RATED VOLTAGE

The DC or AC (rms) continuous working voltage corresponding to the rated power is determined by the following formula:

$$V = \sqrt{(P \times R)}$$

or max. working voltage whichever is less

Where

V = Continuous rated DC or AC (rms) working voltage (V)

P = Rated power (W)

R = Resistance value (Ω)

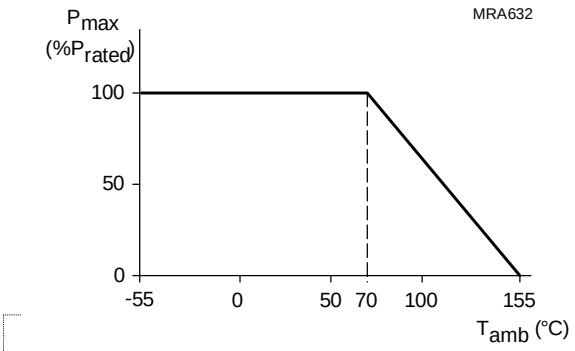


Fig. 10-1 Maximum dissipation (P) in percentage of rated poweras a function of the operating ambient temperature (Tamb)

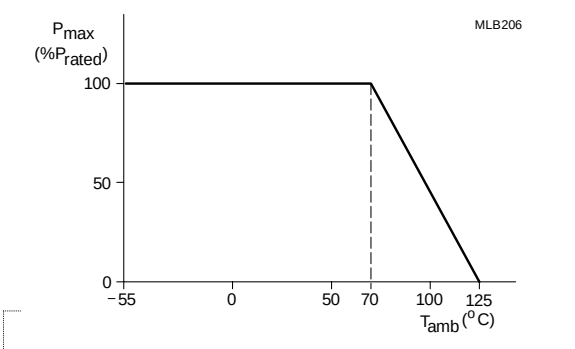


Fig. 10-2 Maximum dissipation (P) in percentage of rated poweras a function of the operating ambient temperature (Tamb)

## TESTS AND REQUIREMENTS

Table 5 Test condition, procedure and requirements

| TEST | TEST METHOD | PROCEDURE | REQUIREMENTS |
|---|---|---|---|
| Temperature Coefficient of Resistance (T.C.R.) | MIL-STD-202 Method 304 | At +25/–55°C and +25/+125°C<br>Formula:<br>$T.C.R=\frac{R_2-R_1}{R_1(t_2-t_1)}\times 10^6$ (ppm/°C)<br>Where<br>$t_1$=+25 °C or specified room temperature<br>$t_2$=–55 °C or +125 °C test temperature<br>$R_1$=resistance at reference temperature in ohms<br>$R_2$=resistance at test temperature in ohms | Refer to table 2 |
| Life/ Endurance | MIL-STD-202 Method 108<br>IEC 60115-1 7.1 | At 70±2°C for 1,000 hours; RCWV applied for 1.5 hours on and 0.5 hour off, still air required | 0075: ± (5%+100mΩ)<br><100mΩ for jumper<br>01005: ±(3% +50mΩ)<br><100mΩ for jumper<br>Others:<br>±(1%+50mΩ) for B/D/F tol<br>±(3%+50mΩ) for J tol<br><100mR for jumper |
| High Temperature Exposure | MIL-STD-202 Method 108 | 1,000 hours at maximum operating temperature depending on specification, unpowered. | 0075: ± (5%+100mΩ)<br><100mΩ for jumper<br>01005: ±(1% +50mΩ)<br>< 50mΩ for jumper<br>Others:<br>±(1%+50mΩ) for B/D/F tol<br>±(2%+50mΩ) for J tol<br><50mR for jumper |
| Moisture Resistance | MIL-STD-202 Method 106 | Each temperature / humidity cycle is defined at 8 hours, 3 cycles / 24 hours for 10d with 25°C / 65°C 95% R.H, without steps 7a & 7b, unpowered<br>Parts mounted on test-boards, without condensation on parts | 0075: ± (2%+100mΩ)<br><100mΩ for jumper<br>01005: ±(2% +50mΩ)<br>< 100mΩ for jumper<br>Others:<br>±(0.5%+50mΩ) for B/ D/F tol<br>±(2%+50mΩ) for J tol<br><100mR for jumper |
| Humidity | IEC 60115-1 10.4 | Steady state for 1000 hours at 40°C / 95% R.H. RCWV applied for 1.5 hours on and 0.5 hour off | 0075: ± (5%+100mΩ)<br>01005: ±(3% +50mΩ)<br>< 100mΩ for jumper<br>Others:<br>±(1%+50mΩ) for B/D/F tol<br>±(2%+50mΩ) for J tol<br><100mR for jumper |

| TEST | TEST METHOD | PROCEDURE | REQUIREMENTS |
|---|---|---|---|
| Thermal Shock | MIL-STD-202 Method 107 | -55/+125°C<br>Note Number of cycles required is 300.<br>Devices mounted<br>Maximum transfer time is 20 seconds.<br>Dwell time is 15 minutes. Air - Air | 0075/01005: ±(1% +50mΩ)<br>< 50mΩ for jumper<br>Others:<br>±(0.5%+50mΩ) for B/D/F tol<br>±(1%+50mΩ) for J tol<br>< 50mR for jumper |
| Short Time Overload | IEC 60115-1 8.1 | 2.5 times RCWV or maximum overload voltage which is less for 5 seconds at room temperature | 0075/01005: ±(2% +50mΩ)<br>< 50mΩ for jumper<br>Others:<br>±(1%+50mΩ) for B/D/F tol<br>±(2%+50mΩ) for J tol<br><50mR for jumper<br>No visible damage |
| Board Flex/ Bending | IEC 60115-1 9.8 | Device mounted or as described only 1 board bending required<br>bending time: 60±5 seconds<br>0075/0100/0201/0402:5mm;<br>0603/0805:3mm;<br>1206 and above:2mm | 0075/01005: ±(1% +50mΩ)<br>< 50mΩ for jumper<br>Others:<br>±(1%+50mΩ) for B/D/F/J tol<br><50mR for jumper<br>No visible damage |
| Solderability - Wetting | J-STD-002 test B1 | Electrical Test not required Magnification 50X SMD conditions:<br>1st step: aging 4 hours at 155°C dry heat<br>2nd step: method B1, leadfree solder bath at 245± 3°C<br>Dipping time: 3± 0.5 seconds | Well tinned<br>(>95% covered)<br>No visible damage |
| -Leaching | J-STD-002 test D | Leadfree solder ,260°C, 30 seconds immersion time | No visible damage |
| -Resistance to Soldering Heat | MIL-STD-202 Method 210 | Condition B, no pre-heat of samples<br>Leadfree solder, 260°C ±5°C, 10 ±1 seconds immersion time<br>Procedure 2 for SMD: devices fluxed and cleaned with isopropanol | 0075: ± (3%+50mΩ)<br><50mΩ for jumper<br>01005: ±(1% +50mΩ)<br>< 50mΩ for jumper<br>Others:<br>±(0.5% +50mΩ) for B/D/F tol.<br>±(1% +50mΩ) for J tol.<br><50mR for jumper<br>No visible damage |

## REVISION HISTORY

| REVISION | DATE | CHANGE NOTIFICATION | DESCRIPTION |
|---|---|---|---|
| Version 12 | Aug. 02, 2022 | - | - I2 dimension updated, for size 1206, size 2010, size 2512. |
| Version 11 | May 15, 2020 | - | - Extend RC0201, RC0402, RC0603, RC0805, RC1206 D tol resistance range to 1ohm |
| Version 10 | Dec. 12, 2018 | - | - Updated 0075 dimensions |
| Version 9 | Mar. 06, 2018 | - | - Add 0.5%/1% marking rule for RC0603 ~ RC2512 based on marking datasheet |
| Version 8 | July 10, 2017 | - | - Add "3W" part number coding for 13" Reel & double power |
| Version 7 | Mar. 7, 2017 | - | - Add 10" packing |
| Version 6 | Feb.15, 2017 | - | - Extend RC0805 and RC1206 resistance range to 100Mohm |
| Version 5 | Oct. 06, 2016 | - | - Description: Update Dimension of I2 of RC2512 (2W) |
| Version 4 | Jan. 22, 2016 | - | - Update resistance range |
| Version 3 | Dec. 24, 2015 | - | - Updated test and requirements |
| Version 2 | Jul. 23, 2015 | - | - Updated test and requirements |
| Version 1 | Jan. 21, 2015 | - | - ESD Safe Reel update |
| Version 0 | Dec. 15, 2014 | - | - First issue of this specification |

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