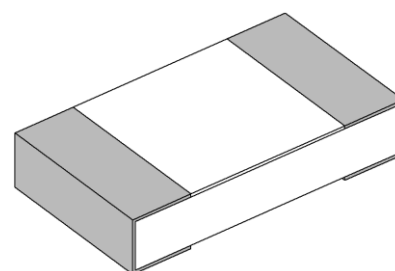


### FEATURES

- Resistance value to 100 GΩ
- Wraparound terminals

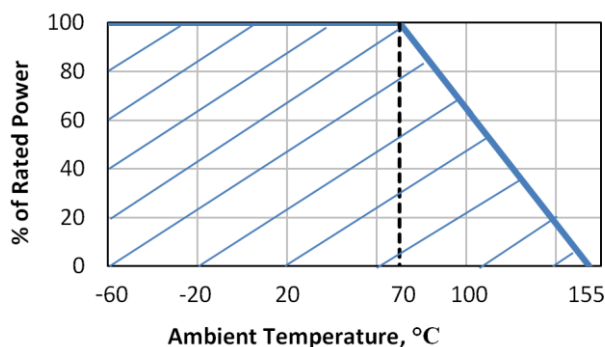


### GENERAL SPECIFICATIONS

- **Operating Temp. Range:** -60 °C to 155°C
- **Load Life 70 °C/ 1000 h:** 10 %
- **Max. Resistance Change at Rated Dissipation  $|\Delta R/R \text{ max.}|$  after 15000 h** 15%
- **Package:** Surface-mount Chip
- **Process:** Thick Film
- **Substrate Material:** 96 % Al<sub>2</sub>O<sub>3</sub>
- **Coating:** Glass
- **Termination Finish:** Sn-Pb

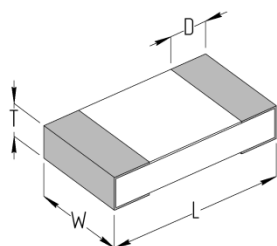
| Part Number | Size | Resistance Value <sup>(1)</sup> ,<br>E24 Series(Ohms) | Resistance<br>Tolerance (± %) | Max. Operating<br>Voltage (V) | Temperature<br>Coefficient<br>(ppm/°C) |
|-------------|------|---|-------------------------------|-------------------------------|--|
| R1-122-0402 | 0402 | 1M-24M  | 20, 10                        | 25                            | ±500                                   |
|             |      | 27M-10G   |                               |                               | -2000                                  |
| R1-122-0603 | 0603 | 1M-24M  | 20, 10                        | 50                            | ±500                                   |
|             |      | 27M-10G   |                               |                               | -2000                                  |
| R1-122-0805 | 0805 | 1M-24M  | 10, 5                         | 100                           | ±500                                   |
|             |      | 27M-100G  |                               |                               | -2000                                  |
| R1-122-1206 | 1206 | 1M-24M  | 10, 5                         | 200                           | ±500                                   |
|             |      | 27M-100G  |                               |                               | -2000                                  |
| R1-122-1610 | 1610 | 1M-24M  | 10, 5                         | 250                           | ±500                                   |
|             |      | 27M-100G  |                               |                               | -2000                                  |

<sup>(1)</sup> Measured at 100 V



### PART NUMBER CODE

| R1-122 | 1206 | 9107          | J         | T               |
|--------|------|---------------|-----------|-----------------|
| model  | size | value         | tolerance | packaging       |
|        | 0402 | 1004 = 1 MΩ   | J = 5 %   | C - carton box  |
|        | 0603 | 1009 = 100 GΩ | K = 10 %  | T - tape & reel |
|        | 0805 |               | M = 20 %  |                 |
|        | 1206 |               |           |                 |
|        | 1610 |               |           |                 |



| Part Number | Dimensions (mm) |           |           |           | Mass (g) |
|-------------|-----------------|-----------|-----------|-----------|----------|
|             | L               | W         | T         | D         |          |
| R1-122-0402 | 1.0±0.1         | 0.5±0.1   | 0.30±0.05 | 0.20±0.15 | <0.01    |
| R1-122-0603 | 1.60±0.15       | 0.8±0.1   | 0.40±0.15 | 0.3±0.2   | <0.01    |
| R1-122-0805 | 2.00±0.15       | 1.25±0.15 | 0.4±0.2   | 0.4±0.2   | 0.01     |
| R1-122-1206 | 3.20±0.15       | 1.6±0.15  | 0.6±0.2   | 0.4±0.2   | 0.015    |
| R1-122-1610 | 4.0±0.3         | 2.5±0.2   | 0.6±0.2   | 0.6±0.2   | 0.03     |

### PERFORMANCE CHARACTERISTICS

| Test                         | Condition   | ΔR max.   |
|------------------------------|---|---|
| Solderability                | IEC60115-1 (4.17)/ IEC 60068-2-20<br>(235±5) °C; 2 s; solder bath method; SnPb40  | Good tinning<br>(>95 % covered,<br>no visible damage) |
| Resistance to soldering heat | IEC60115-1 (4.18.2)/ IEC 60068-2-20<br>(260±5) °C; (15±1) s                       | ± 10 %;<br>no visible damage                          |
| Cold                         | IEC60115-1 (4.23.4)/ IEC 60068-2-1<br>-60 °C; (60±15) min                         | ± 10 %  |
| Rapid change of temperature  | IEC60115-1 (4.19)/ IEC 60068-2-14<br>30 min at -60 °C; 30 min at 155 °C; 5 cycles | ±10 %   |
| Low air pressure             | IEC60115-1 (4.23.5)/ IEC 60068-2-13<br>0,67kPa;30 min;15 °C to 35 °C              | No visible damage                                     |
| Damp heat, steady state      | IEC60115-1 (4.24)/ IEC 60068-2-78<br>(40±2) °C; 21 days; (93±3) % RH              | ± 5 %   |

All tests are carried out in accordance with the following specifications:

- IEC 60115-1 (clause),
- IEC 60068-2-xx (test method).

### PACKAGING

**For manual assembly:**  
carton box.

**For automatic assembly:**  
tape and reel (2000 to 5000 pcs).

### MOUNTING PROCEDURE

- can be used in automatic or manual assembly techniques and are suitable for reflow soldering and wave soldering;
- do not mount 'face-down'.