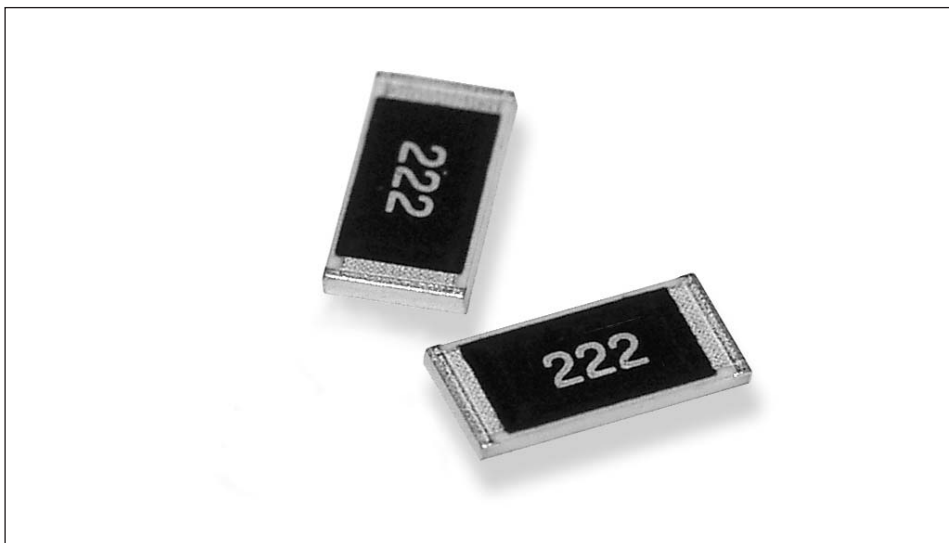


## Type 3520 Series

### Key Features

- 1 Watt at 70°C
- Small Size to Power Ratio
- Supplied on Tape
- Available via Distribution
- Value Marked on Resistor
- 400 Volt Maximum Overload
- 200 Volt Working Voltage
- Laboratory Kit Available
- Low Profile



TE Connectivity is pleased to introduce this low cost high power device, suitable for auto placement in volume, and for most applications, including high frequency operations, owing to the short lead structure. It is attractively priced and available on 7" reels of 4000 pieces.

### Characteristics - Electrical

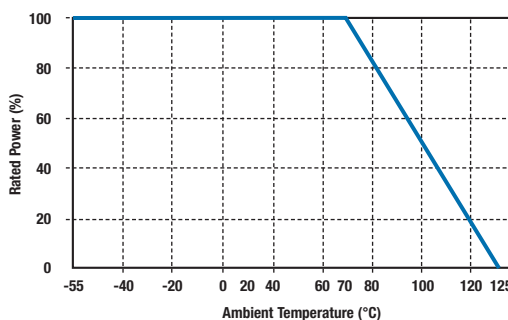
|                          |                                 |
|--------------------------|---------------------------------|
| Power Rating:            | 1 Watt at 70°C**                |
| Max. RCWV*:              | 200V                            |
| Max. Overload Voltage:   | 400V                            |
| Resistance Tolerance(%): | ±5%                             |
| Resistance Range:        | 1R0 - 1M0                       |
| Temperature Coefficient: | ±200ppm<br>±350ppm**(below 10R) |
| Resistance Grid Value:   | E-24                            |

\* Rated continuous working voltage (RCWV) shall be determined from

$RCWV = \sqrt{\text{Rated Power} \times \text{Resistance Value}}$ , or Maximum RCWV listed above, whichever is less

\*\* Recommended Circuit Board Design - If this device is anticipated to run at full continuous power then action to improve the cooling should be taken. This can be a metal substrate, copper pad left under the chip, an opening in the PCB or enlarged silver conductor pads each end.

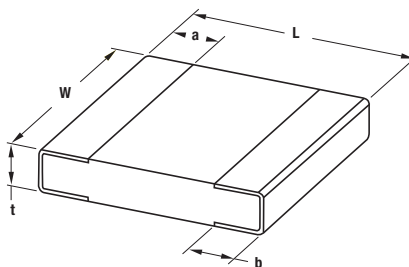
### Power Derating Curve



For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with this curve.

## Type 3520 Series

### Dimensions



| L             | W             | a             | b             | t             |
|---------------|---------------|---------------|---------------|---------------|
| 6.40<br>±0.20 | 3.20<br>±0.20 | 0.70<br>±0.10 | 0.70<br>±0.20 | 0.60<br>±0.10 |

### Handling Recommendations

When flow soldering - the land width must be smaller than the Chip Resistor width to properly control the solder application. Generally, the land width can be Chip Resistor width (W) x 0.7 to 0.8. When reflow soldering - solder application amount can be adjusted. Thus the land width can be set to W x 1.0 to 1.3.

### How to Order

| 3520        | 1K0                                                                                               | J         | T               |
|-------------|---------------------------------------------------------------------------------------------------|-----------|-----------------|
| Common Part | Resistance Value                                                                                  | Tolerance | Pack Style      |
| 3520        | 1 ohm<br>1000 milli ohms<br>1R0<br>1K ohm<br>1000 ohms<br>1K0<br>1 Meg ohm<br>1000000 ohms<br>1M0 | J - 5%    | T - 4000 / reel |