

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
- Moisture sensitivity level - MSL1



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.

Note: SMD (Surface mount devices) resistors and inductors should be kept in their original packaging to protect them from ESD (Electrostatic Discharge). The full reels can be broken into smaller quantities, without exposing them to ESD, as long as the components are still in the plastic or paper tape. These resistors and inductors should not be removed from the plastic or paper tape unless they are in an ESD protected environment.

Characteristics - Electrical

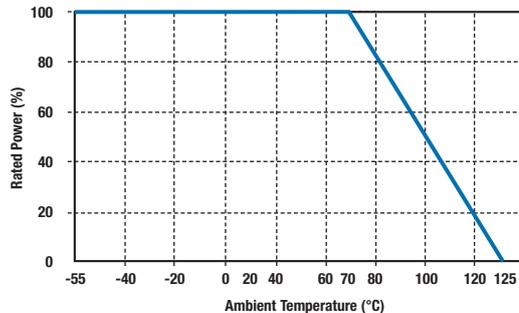
Power Rating:	1 Watt at 70°C**
Max. RCWV*:	200V
Max. Overload Voltage:	400V
Resistance Tolerance(%):	±5%
Resistance Range:	1R0 - 1M0
Temperature Coefficient:	±200ppm ±350ppm**(below 10R)
Resistance Grid Value:	E-24

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

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

** 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.

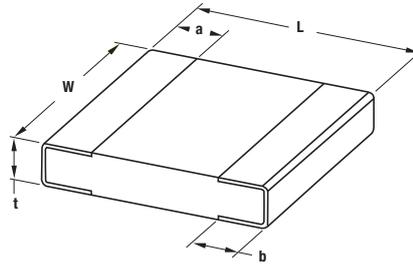
Power Derating Curve



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

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Dimensions



L	W	a	b	t
6.40	3.20	0.70	0.70	0.60
±0.20	±0.20	±0.10	±0.20	±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 1000 milli ohms 1R0 1K ohm 1000 ohms 1K0 1 Meg ohm 1000000 ohms 1M0	J - 5%	T - 4000 / reel