

## Type 3521 Series

**Key Features** 

2 Watts at 70°C

Small size to power ratio

Supplied on tape

Value marked on resistor

Available via distribution

500 volt maximum overload

250 volt working voltage

Terminal finish matte Sn over Ni



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 at 70°C	2W
Max RCWV*	250V
Max overload voltage	500V
Resistance Tolerance	1%
Resistance range	1R0 - 1M0
Temperature Coefficient	<10R ±200PPM
	10R - 1M0 ±100PPM
	>1M0 ±200PPM
Temperature range	-55°C ~ +155°C
Ambient temperature	70°C

<sup>\*</sup> Rated continuous working voltage (RCWV) shall be determined from

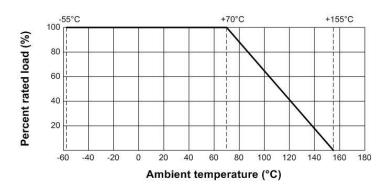
RCWV = Rated Power x Resistance Value, or Maximum RCWV listed above, whichever is less

\*\*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.

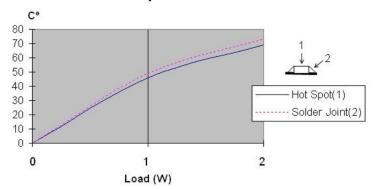


# Power derating curve

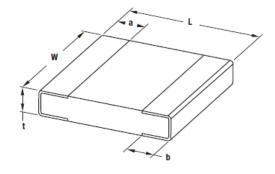
For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with this curve.



### **Temperature Rise**



#### **Dimensions**



L ± 0.10	W ± 0.15	t ± 0.10	a ± 0.25	b ± 0.20
6.35	3.20	0.55	0.60	0.50

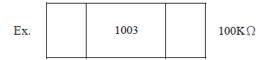


# SMD POWER RESISTORS

### Marking:

Marking for E-96 series in 2512 size: 4 digit marking

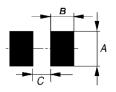
First three digits are significant figures of resistance and the fourth digit represents the number of following zeros



\*For ohmic values below 100  $\Omega$ , letter"R" is for decimal point.



# Recommended PCB layout



A	В	С
3.70	2.45	2.70

- 4 layers PCB specification:
- 1) Outside 2 layers (Top and Bottom) with copper foil thickness at 2oz.
- 2) Inside 2 layers (Middle layers) with copper foil thickness at 4 oz.

#### **How To Order**

25	1	
5	41	

3521	1K0	F	Т
<b>Common Part</b>	Resistance Value	Tolerance	Pack Style
	1 ohm 1R0		
	1K ohm 1000 ohms		
3521	1K0	F – 1%	T – 4000 reel
	1 Meg ohm		1661
	1000000 ohms		
	1M0		

# **Mouser Electronics**

**Authorized Distributor** 

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TE Connectivity: 3521150RFT