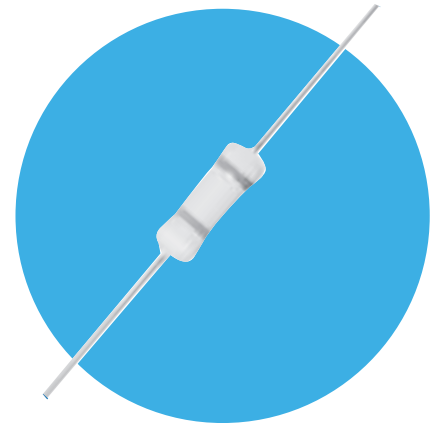



## Low Value Metal Film Resistors

### 2500 Series

- Resistance values down to 0.025 ohms
- Low inductance
- Tolerances down to 1%
- Flameproof protection

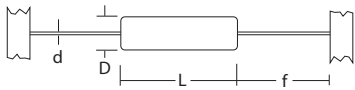


 All parts are Pb-free and comply with EU Directive 2011/65/EU (RoHS2)

### Electrical Data

		2504	Notes
Power rating at 25°C	watts	2.0	
Power rating at 70°C	watts	1.5	
Resistance range	ohms	0R025 to 1	
Isolation voltage	volts	700	
TCR (+20° to 70°C)	ppm/°C	0 to +380	
Resistance tolerance	%	1, 2, 5, 10	Measured at 6mm from caps
Thermal impedance	°C/watt	65	
Values		E24	
Operating temperature range	°C	-55 to +150	

### Physical Data

Dimensions (mm) & weight (g)								
Type	L Max	D Max	f min	d nom	PCB mounting centres	Min. bend radius	Wt. nom	
2504	14.5	5.3	23.8	0.8	20.3	1.2	1.1	

#### Construction

The metal film is deposited on a high purity ceramic rod. End caps are force fitted and termination wires welded to the caps. The resistive film is then adjusted to the required value; finally the cement protection is applied to the resistor body and marked with indelible ink.

#### Terminations

- Material** Solder-coated copper wire.
- Strength** The terminations meet the requirements of IEC 68.2.21
- Solderability** The terminations meet the requirements of IEC 115-1, Clause 4.17.3.2

#### Marking

Values below R10 are colour coded with 3 bands. Values R10 and above are marked with 4 bands. IEC 62 colours are used.

#### Solvent Resistance

The body protection and marking are resistant to all normal industrial cleaning fluids suitable for printed circuits.

#### Flammability

The resistors will not burn or emit incandescent particles under any condition of applied temperature or power overload.

#### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

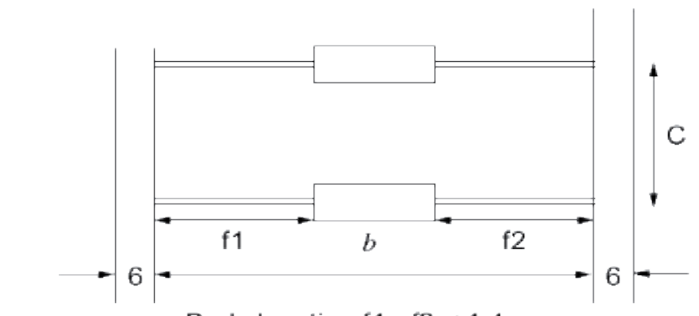
2500 Series

## Performance

		MAXIMUM (+0.001Ω)
Load at rated power (1000 hours @ 25°C)	ΔR%	3
Load at rated power (1000 hours @ 70°C)	ΔR%	2
Derating from rated power at 70°C		Linear to zero at 150°C
Short term overload (6.25 x Pr for 5s)	ΔR%	0.5
Climatic	ΔR%	2
Climatic category		55 / 150 / 56
Resistance to solder heat	ΔR%	0.5
Vibration and bump	ΔR%	0.5
Inductance (measured at 6mm from caps)	nH	≤20

## Packaging

The standard packaging for 2504 is taped. The critical dimensions are shown in Figure 1. The component wires will not protrude beyond the outside edge of the tapes. Taped product is then packed into ammo boxes. Alternative packaging is available by request. Pre-formed resistors are available and are supplied loose packed in plastic bags or boxes.

Dimensions (mm)			Figure 1
Type	b	C	
2504	67	10	

## Ordering Procedure

Example: 2504 at 0.33 ohms and 5% tolerance in an ammo pack box of 1000 pieces -

**2504 - R 33 J I**

Type \_\_\_\_\_

Value (use IEC62 code) \_\_\_\_\_

Tolerance (use IEC62 code) \_\_\_\_\_

F	1%	J	5%
G	2%	K	10%

Packing \_\_\_\_\_

I	Ammo	2504	1000/box	Standard
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