

# **Trimmable Chip Resistors**



# Type TCR Series

# Ch



Precious metal terminations are screen printed onto a ceramic base and fired. The resistive element is screen printed and fired and the passivation layer added. The pre-scribed tile is broken into strips, the end plating is fired on and the strips broken into individual components. Final termination is made by electroplating.

#### **Key Features**

- TCR chip resistors are suitable for most applications, including high frequency operation, owing to the short lead structure and low capacitance.
- The TCR series of chip resistors is designed to be used in circuits where variable resistors might otherwise be used.
- The resistance film and the coating have been specified to permit YAG laser trimming.
- Case sizes 0805 and 1206.

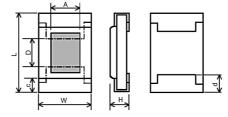
# Characteristics -

**Type TCR Series** 

## Electrical

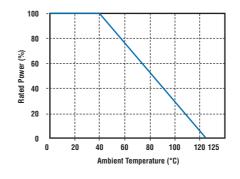
	30	805	1206			
Rated Power @ 70°C (W):	0.1		0.125			
Resistance Range (Ohms) Min: Max:	1 9.1	10 4M7	1 9.1	10 4M7		
Selection Series	E24					
Tolerance (%):	±15 or 0/-30					
Code Letter:	L P					
Temperature Coefficient (ppm/°C):	-200/+500	± 200	-200/+500	± 200		
Operating Temperature Range (°C):	-55 to +125					
Climatic Category:	55/125/56					
Limiting Element Voltage (V):	150 200			0		
Insulation Resistance Dry Min (M ohms):	1000					

#### Dimensions



Style	L	W	Н	Α	D	C	d
0805	2.0 ± 0.1	1.25± 0.10	0.55 ± 0.1	0.71 ± 0.1	0.66 ± 0.1	$0.4 \pm 0.2$	0.4± 0.2
1206	3.2 ± 0.15	1.6 ± 0.15	0.55 ± 0.1	0.95 ± 0.1	1.30 ± 0.1	0.5 ± 0.25	0.5± 0.25

## **Power Derating Curve**



#### Marking

TCR series resistors are not marked.

### Mounting

The resistors are suitable for processing on automatic insertion equipment.

#### Storage

Unopened reels should be stored within a temperature range of +5 °C to +25 °C, separated from any dust, chemicals and solvent based materials. Non-adherence to this procedure could effect the solderability of this product.





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## **Performance Characteristics**

The evaluation of the performance characteristics is carried out with reference to IEC specifications QC 400 000 and QC 400 600

Long Term Tests ± (5% + 0.1 ohm)
Climatic sequence
Damp heat, steady state
Endurance at 70°C
Endurance at 125°C
Short Term Tests ± (1% + 0.05 ohm)
Overload
Adhesion
Bond strength of end face plating
Rapid change of temperature
Resistance to soldering heat

#### How to Order

Orders for these components should include the following information:-Type, tolerance code letter and value e.g. **TCR0805L470K.** 

# **Mouser Electronics**

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TE Connectivity: TCR1206N75K