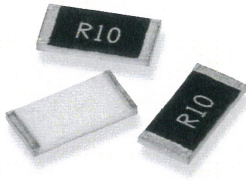


Type CRL Series

Type CRL Series



Tyco are pleased to offer this High Power, thick film chip resistor for current sensing positions. It has a special metal glaze resistive element and a barrier layer underneath the solder to prolong terminal life. Following the developments by semiconductor manufacturers in the production of a range of IC's for battery charge management and low voltage power supplies, these resistors satisfy the demand for a low ohmic shunt resistor to act as a current sensor. Unique parallel print enables very low values and high powers for thick film resistors.

Key Features

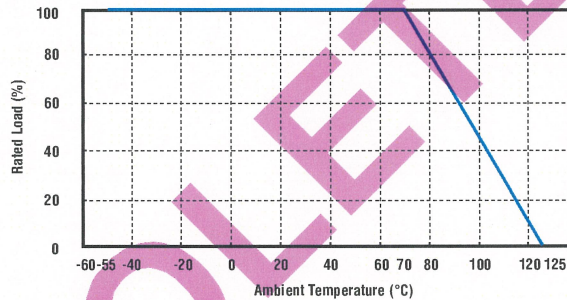
- Up to 1 Watt at 70°C
- Values Down to R01
- Supplied on Tape
- Ideal for Current Detection
- 0.5 Watt by 0805 x 3
- 1 Watt by 0805 x 6

Characteristics - Electrical

	CRL1220		CRL3720		CRL7520	
Power Rating at 70°C	1/4W		1/2W		1W	
Resistance Range	22mΩ-68mΩ	0.1Ω-4.7Ω	22mΩ-68mΩ	0.1Ω	10mΩ-68mΩ	0.1Ω
Resistance Tolerance	2% - 5%	1%	1% - 2%	1% - 2%	1% - 2%	1% - 2%
Temperature Coefficient of Resistance	0~+350ppm/°C	0~+200ppm/°C	0~+350ppm/°C	0~+200ppm/°C	0~+350ppm/°C	0~+200ppm/°C
Resistance Values	E6		E6*		E6*	
Max. Operating Temperature	±125°C					
Short Time Overload	±0.5%					
Load Life	±0.5%					
Moisture Life	±0.5%					
Temperature Cycle	±0.5%					
Resistance to Solder Heat	±0.5%					

* For 1/2 W Additional Existing Value: R025, R04, R05, R075
 * For 1 W Additional Existing Value: R018, R02, R025, R04, R05, R075

Derating Curve

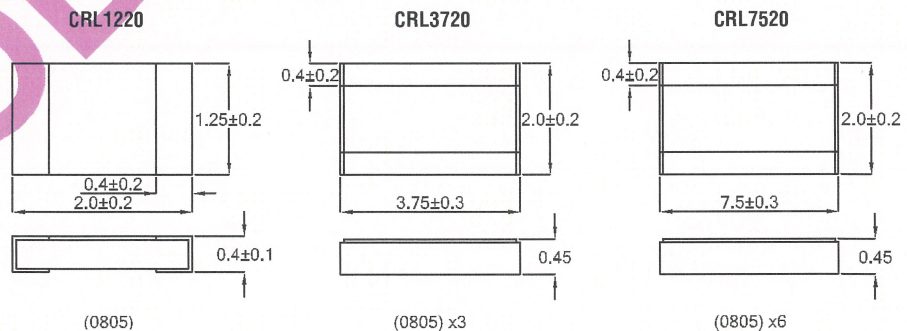


For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with the curve.

Dimensions

Handling Recommendations

When flow soldering - the land width must be smaller than the chip resistor width to control the solder application. Generally, the land width can be chip resistor width x 0.7 to 0.8. When reflow soldering - The amount of solder can be adjusted. Thus the land width can be set to W x 1.0 to 1.3.



How to Order

CRL	1220	T	R10	J	TD
Common Part	Size	Temp. Coefficient	Resistor Value	Tolerance	Packaging
CRL - Standard	See Above e.g. 1220 1/4W	S - ±200ppm/°C T - ±350ppm/°C	0.1 ohm (100 milli ohm) R10 1 ohm (1000 milli ohm) 1R0	J - ±5% G - ±2% F - ±1%	TD - Taped 5000 on reel

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity:

[CRL1220R10](#) [CRL1220T1R2J](#) [CRL1220T2R2J](#) [CRL1220TR033J](#) [CRL1220TR047J](#) [CRL1220TR22J](#)
[CRL1220TR68J](#)