Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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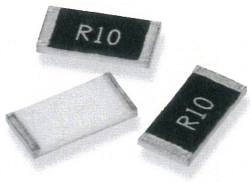
SMD Low Ohmic - Current Sense Resistors

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

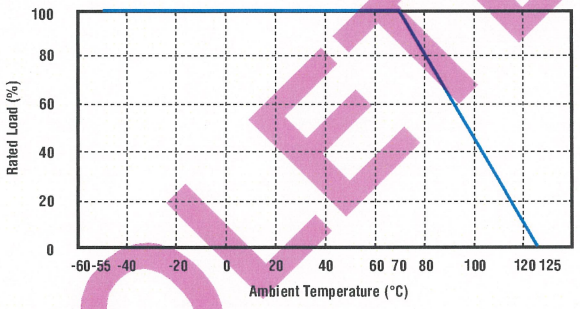
Characteristics - Electrical

	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

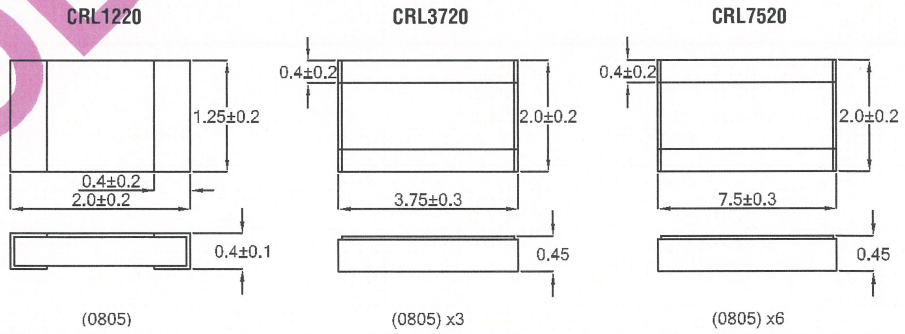


For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with the curve.

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