

Product Family: [Current Sense Chip Resistor \(Long Electrode\)](#)

Part Number Series: [RL Series](#)



Construction:

- High Purity Alumina Substrate
- Thin-film resistive element
- Wrap around electrodes—long side for higher power handling
- 100% matte tin over Ni terminations (RoHS compliant and Pb Free)

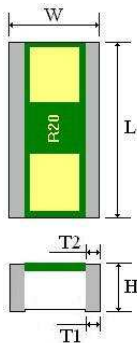
Features:

- 1508 and 3008 English sizes
- Power ratings of 1/2W, 1W and 2W
- Tolerances down to 1.0%
- Resistances between 1mΩ ~ 2.2Ω

Description:

These thin film low resistance chip resistors exhibit excellent performance in resistance, noise performance, surface heat distribution and a lower surface temperature. Useful in many current sensing applications. Available in power ratings of 1/2, 1.0 and 2.0 watt.

Product Dimensions:



| Dimension | L | W | H | T1 | T2 |
|----------------|--------------|--------------|------------------------|--------------|--------------|
| RL3720 (0815) | 0.148 ±0.012 | 0.079 ±0.008 | 0.016 ±0.004 | 0.016 ±0.008 | 0.016 ±0.008 |
| RL3720W (0815) | 0.148 ±0.012 | 0.079 ±0.008 | 0.018 +0.006/-0.004 | 0.016 ±0.008 | 0.016 ±0.008 |
| RL7520W (0830) | 0.295 ±0.012 | 0.079 ±0.008 | 0.018 +0.006/-0.004 | 0.016 ±0.008 | 0.016 ±0.008 |

Notes: All dimensions are shown in inches, but use metric size when ordering as shown in the part numbering section. English case sizes are shown in parenthesis above.

Part Numbering: Ex: RL3720WRR10F-*

| Product Designator | Metric Size W x L | Temp. Coefficient of Resistance (TCR) | Resistance Value | Resistance Tolerance |
|--------------------|--|---|---|------------------------|
| RL | 3720 (1/2 W) 3720W (1 W) 7520W (2 W) | ±50ppm/°C (Q) ±100ppm/°C (R) ±200ppm/°C (S) ±350ppm/°C (T) ±420ppm/°C (T) ±800ppm/°C (T) | Use 3 digit code for all values. "R" denotes decimal position as necessary | ±1.0% (F) ±2.0% (G) |

* Note : All part numbers will automatically have a "-C" appended to the end of them to indicate RoHS compliance/Pb Free (RoHS 6/6). This will be automatically assigned by TFT. These parts are not available in non-RoHS.

Examples:

| Part Number | Size (English)(Power) | TCR | Resistance (ohms) | Tolerance |
|----------------|--------------------------|-------------------|--------------------|--------------|
| RL7520WT009G-* | 7520 (0830)(2 watt) | T (±420ppm/°C) | 009 (0.009 ohm) | G (±2.0%) |
| RL3720RR10G-* | 3720 (0815)(1/2 watt) | R (±100ppm/°C) | R10 (0.10 ohm) | G (±2.0%) |
| RL3720WRR10F-* | 3720W (0815)(1 watt) | R (±100ppm/°C) | R10 (0.10 ohm) | F (±1.0%) |

Electrical Specifications:

| Type | RL3720 | | | RL3720W | | | | RL7520W | | | |
|----------------------|--------------------|----------------------|-------------|--------------------|----------------------|---------------------------------|----------------------|----------------------|----------------------|---------------------------------|--------------|
| English Size | 0815 | | | 0815 | | | | 0830 | | | |
| Power | 1/2 Watt | | | 1 Watt | | | | 2 Watt | | | |
| Tolerance% (code) | ±1.0(F) ±2.0(G) | | | ±1.0(F) ±2.0(G) | | | | ±1.0(F) ±2.0(G) | | | |
| Resistance Range (Ω) | 0.010~ 0.018 | 0.022~ 0.068 | 0.1~ 2.2 | 0.001~ 0.004 | 0.005~ 0.009 | 0.010~ 0.091 | 0.1~ 1.0 | 0.001~ 0.004 | 0.005~ 0.009 | 0.010~ 0.091 | 0.1~ 0.47 |
| Resistance Offering | E-6 Values | | | 1mΩ steps | | E-24 Values | | 1mΩ steps | | E-12 Values | |
| TCR ppm/°C (code) | 0~350(T) | 0~200(S) 0~350(T) | 0~100(R) | 0~350(T) | 0~200(S) 0~350(T) | 0~50(Q) 0~100(R) 0~200(S) | 0~200(S) 0~800(T) | 0~200(S) 0~420(T) | 0~100(R) 0~350(T) | 0~50(Q) 0~100(R) 0~200(S) | |
| Packaging | 4,000pcs/reel | | | | | | | | | | |

Note:

- For the Resistance Offerings shown in the table above, if "1mΩ steps" is shown, that indicates that all resistances between the highest and lowest values shown are available with 1 milliohm steps. If "E-## Values" is shown, that indicates that resistances between the highest and lowest values shown are only available in the standard values for that series. A listing of standard E-## values is available on our website.

Power Derating Curve:

