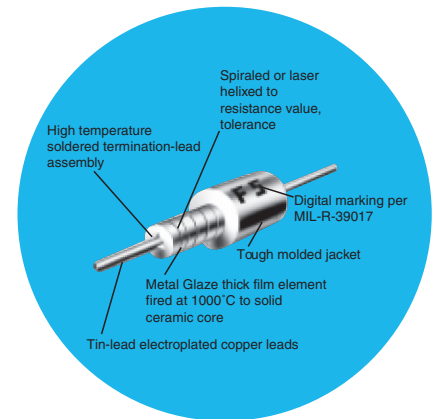


# Established Reliability Mil-Qualified Metal Glaze™ Resistor

## RLR Series

- 1/2 watt
- TCR of  $\pm 100$  ppm/°C
- 1% and 2% tolerance
- 4.3 ohms to 3.01M ohms
- MIL-R-39017 approved to "S" level



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

## Electrical Data

MIL Type	Marking	Tolerance (±%)	T.C. (ppm/°C)	Power Rating (watts)	Resistance Range (ohms)	Nominal Size	Max Voltage Rating
RLR20/S	Stamp	1, 2	100	1/2 @ 70°C	4.3 to 3.01M	1/2W	350

## Environmental Data

Test Conditions	MIL-R-22684 Test Limits Allowed	Max. %ΔR (±3σ)
Temperature Coefficient (ppm/°C)	±100	±100
Low Temperature Operation	±0.25%	±0.05%
Thermal Shock	±0.25%	±0.15%
Moisture Resistance	±1.00%	±0.50%
Short Time Overload	±0.50%	±0.15%
Load Life (70°C, Rated Power) 1000 hour	±4.00%	±0.50%
Terminal Strength	±0.25%	±0.05%
Effect of Soldering	±0.25%	±0.10%
Shock	±0.50%	±0.05%
Vibration	±0.50%	±0.05%
High Temperature Exposure (150°C No Load)	±2.00%	±0.50%
Dielectric Strength	±0.25%	±0.05%

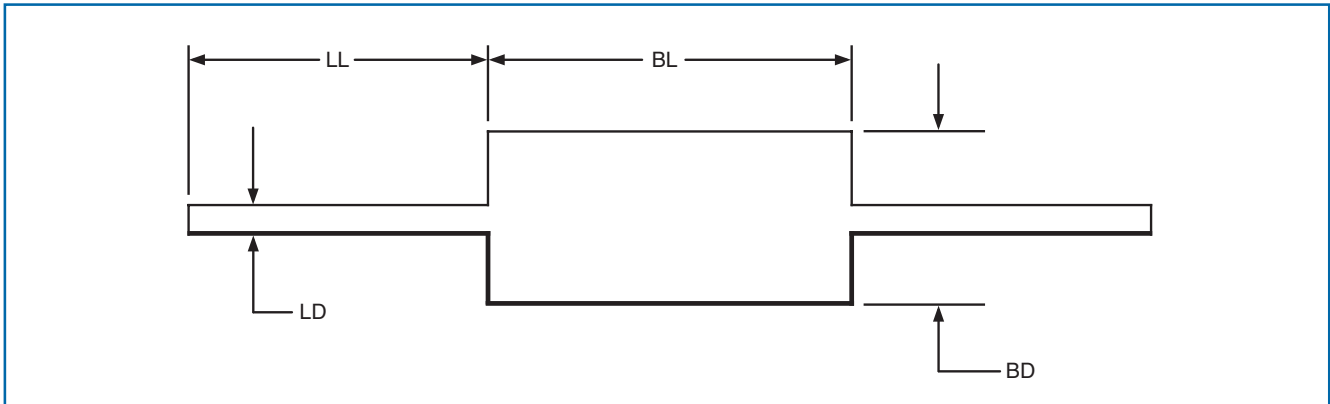
**ESTABLISHED RELIABILITY MIL SPECIFICATIONS:** RLR products listed above are qualified to the appropriate established reliability MIL Specification. In general, Metal Glaze units such as these are specified for all RLR requirements.

### 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.

RLR Series

## Physical Data



Dimensions (Inches and (mm))

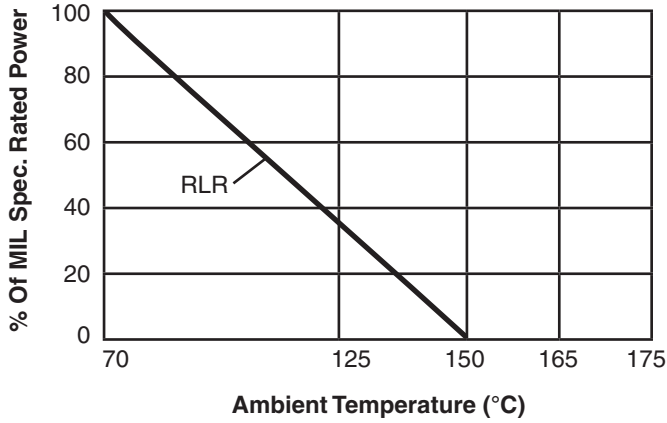
Nominal Size	Body Length BL	Body Diameter BD	Lead Length LL	Lead Diameter LD	Clean Lead
1/2 watt	0.390 ±0.010 (9.9 ±0.3)	0.140 ±0.008 (3.6 ±0.2)	1.50 ±0.125 (38.1 ±3.2)	0.032 ±0.002 (0.81 ±0.05)	0.450 (11.4)

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RLR Series

## MIL Spec. Power Derating Chart



## Ordering Data

Sample Part No. ....	RLR	20	C	1001	F	S
<b>MIL Style</b> - RL = Fixed Film Resistor. Established reliability.						
<b>Power Rating</b> - 20 = 1/2 watt						
<b>Lead Material</b> - C = Solderable/weldable leads						
<b>Resistance</b> - First three digits represent significant figures; fourth digit is number of zeros.						
<b>Tolerance</b> - F = ±1%, G = ±2%						
<b>Failure Rate</b> - S = 0.001% for 1000 hours (60% confidence)						

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