Radial lead metal thin film chip resistors(the highest reliability and precision)

■LRG series

Features

- Most reliable and the highest precision radial read thin film resistor
- The tightest resistance tolerance: +/-0.01%,the smallest temperature coefficient of resistance: ±1ppm/°C

Applications

- Industrial measurement, electrical scales
- High precision sensors, medical electronics

◆Part numbering system

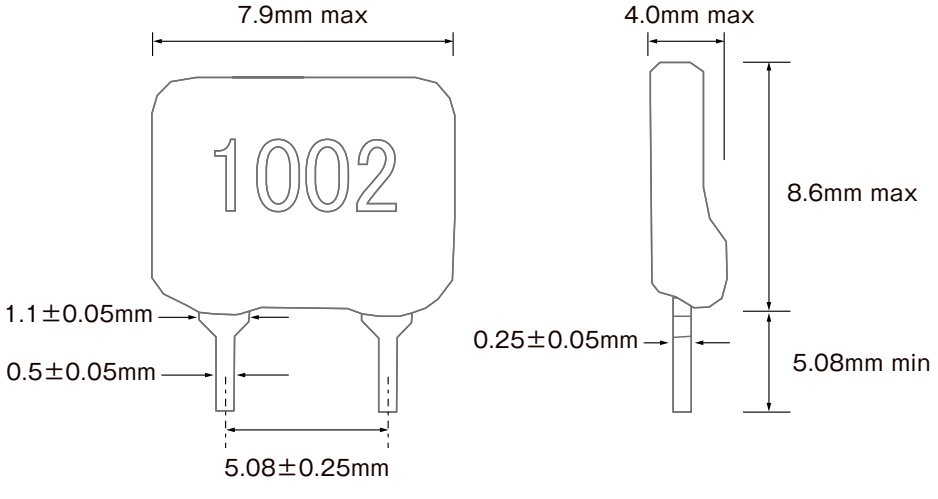
LRG 020 L - 1002 - L - T01

- LRG: Series code
- 020: Size
- L: Temperature coefficient of resistance
- 1002: Nominal resistance value
- L: Resistance tolerance
- T01: Packaging quantity: T01(100pcs)

◆Electrical Specification

Type	Lead pitch (mm)	Power ratings	Temperature coefficient of resistance (ppm/°C)	Resistance range(Ω) Resistance tolerance ±0.01% (L)	±0.02% (P)	±0.05% (W)	±0.5% (D)	Maximum voltage	Resistance value series	Operating temperature	Packaging quantity
LRG020	5.08	0.3W	±1(K)	100≦R≦100k				250V	E-24, E-96	-55℃ ~ 125℃	100pcs
			±2(L)								
			±5(V)								

◆Dimensions



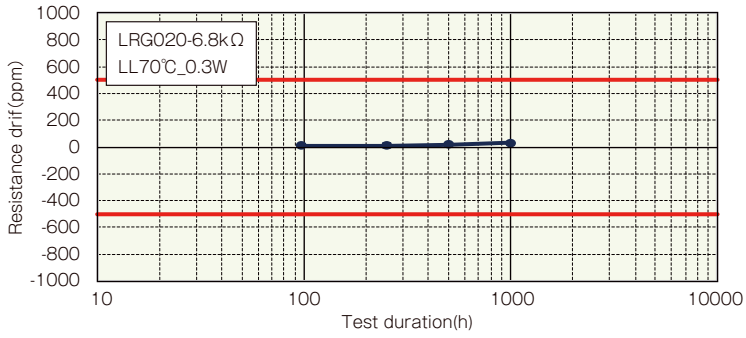
◆Reliability specification

Test items	Condition (test methods (MIL-PRF-55342/JIS C5201-1)	Standard
Short time overload	2.5 x rated voltage,*1 5seconds	±0.05%+0.01Ω
Life (biased)	70℃, rated voltage,*1 90min on 30min off, 2000hours	±0.05%+0.01Ω
High temperature high humidity	85℃, 85%RH, 1/10 of rated power, 90min on 30min off, 2000hours	±0.05%+0.01Ω
Temperature shock	-65℃ (15min) ~ 150℃ (15min) 100cycles	±0.05%+0.01Ω
High temperature exposure	155℃, no bias, 1000hours	±0.05%+0.01Ω
Resistance to soldering heat	260±5℃, 10 seconds (reflow)	±0.05%+0.01Ω

*1 Rated voltage is given by $E=\sqrt{R \times P}$
E= rated voltage (V), R=nominal resistance value(Ω), P=rated power(W)
If rated voltage exceeds maximum voltage /element, maximum voltage/element is the rated voltage.

◆Reliability test data

○Biased life test



◆Derating Curve