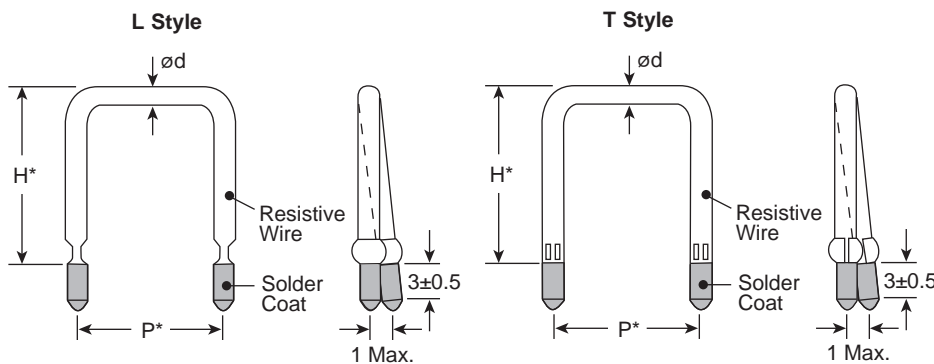


**features**

- The super low resistance ( $3\text{m}\Omega \sim$ ) is suitable for high power current detection
- Pitches and heights adjustable according to mounting conditions
- All custom-made products
- Easy soldering
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.



**dimensions and construction**



\* Please consult with factory about dimensions "P" and "H"  
T style is applied for the diameter of  $\phi$  2.3 or above

**ordering information**

<b>LR</b>	<b>09</b>	<b>D</b>	<b>L</b>	<b>10</b>	<b>20L</b>	<b>J</b>
Type	Symbol	Termination Material	Style	Insertion Pitch	Nominal Resistance	Resistance Tolerance
	06~20: L-Style 23~29: T-Style	D: SnAgCu N: No surface treatment	L (06~20) T (23~29)	Insertion Pitch	3 digits	H: $\pm 3\%$ J: $\pm 5\%$

leaded resistors

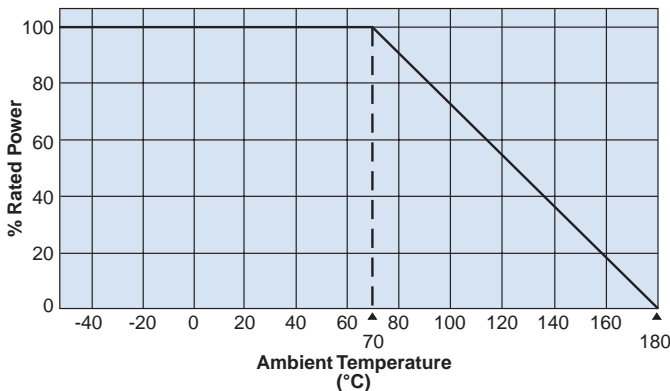
## applications and ratings

Part Designation	Symbol	ød Diameter (mm)	Maximum Current Rating (A)	Resistance Range	Resistance Tolerance	T.C.R. (ppm/°C) Max.	Rated Ambient Temperature	Operating Temperature Range
LR06D	06	0.6	3.0	50mΩ - 100mΩ	H: ±3% J: ±5%	±100	+70°C	-40°C to +180°C
LR07D	07	0.7	4.0	30mΩ - 70mΩ				
LR08D	08	0.8	4.5	20mΩ - 50mΩ				
LR09D	09	0.9	5.0	20mΩ - 40mΩ				
LR10D	10	1.0	5.5	15mΩ - 30mΩ				
LR11D	11	1.1	6.0	15mΩ - 20mΩ				
LR12D	12	1.2	7.0	10mΩ - 20mΩ				
LR13D	13	1.3	7.5	10mΩ - 20mΩ				
LR14D	14	1.4	8.0	10mΩ - 20mΩ				
LR15D	15	1.5	9.0	10mΩ - 20mΩ				
LR16D	16	1.6	9.5	10mΩ - 15mΩ				
LR18D	18	1.8	11	5mΩ - 10mΩ				
LR20D	20	2.0	12	5mΩ - 10mΩ				
LR23D	23	2.3	14	3mΩ - 10mΩ				
LR26D	26	2.6	18	3mΩ - 5mΩ				
LR29D	29	2.9	21	3mΩ - 5mΩ				

\* Other diameters and resistances are also available on request

## environmental applications

### Derating Curve



For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the above derating curve.

## Performance Characteristics

Parameter	Requirement $\Delta R \pm\%$		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/+125°C
Resistance to Soldering Heat	±2.0%	±1.6%	350°C ± 10°C, 3 seconds
Moisture Resistance	±3.0%	±2.7%	Power rating x 1/10, 40°C, 90% - 95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±5.0%	±3.0%	Rated voltage, 70°C, 1000 hours 1.5 hr ON, 0.5 hr OFF cycle

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

2/20/17