

Temperature Sensing Resistors

PTC Chip – LT73 Series



H = 1.6, W = 0.8, D = 0.45
Terminations W = 0.3

- Highly linear PTC response to temperature change
- Each part is individually value marked in black over orange
- Applications include temperature compensation and thermal protection
- TCRs at 3000 ppm and 3900 ppm meet internationally recognised standards



Linear PTC chip for thermal sensing. The tiny 0805 size thin film temperature sensor is manufactured by depositing a special alloy, ensuring long life stability. Supplied on 8mm tape.

Resistor tolerance	± 5%	Temperature coefficient	3000 or 3900 ppm
Rated power @ 70°C	0.1 watt to zero @ 120°C	TCR measurement range	+25°C to +75°C
Working voltage	50V max.	TCR tolerance	± 10%
Overload voltage	100V max.	Insulation resistance	>10MΩ
Operating temperature	-40°C to +125°C		

Resistance @ 25°C	Resistance @ 70°C	TCR	Order Code
1,000Ω	1,140Ω	3000ppm	732-310
1,500Ω	1,700Ω	3000ppm	732-321
2,000Ω	2,300Ω	3000ppm	732-333
3,000Ω	3,400Ω	3000ppm	732-345
680Ω	799.3Ω	3900ppm	732-357
1,000Ω	1,180Ω	3900ppm	732-369
1,500Ω	1,760Ω	3900ppm	732-370
2,000Ω	2,350Ω	3900ppm	732-382
3,000Ω	3,530Ω	3900ppm	732-394

RP307

Order Multiple=5	Price Each				
Order Code	5+	25+	100+	500+	1000+
All Order Codes					

PTC, Axial Lead



9 mW/°C types: L = 6.5, Dia = 2.3, Leads L = 30
5 mW/°C types: L = 3.2, Dia = 1.7, Leads L = 30



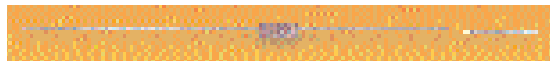
- Resistance value increases linearly with temperature rise
- Applications include temperature compensation in sensitive electronic circuits
- Available ratings 0.25W and 0.17W

Heat dissipation	0.25W = 9mW/°C, 0.17W = 5mW/°C
Time constant	0.25W = 7.5 sec, 0.17W = 3.0sec
Standard resistance @ 25°C	1KΩ, 5.1KΩ, 10KΩ ±5%
Temperature coefficient	0.3%/°C @ 25°C (3000ppm/°C) ± 10%
Resistance ratio	R25°C/R125°C = 1.37
Operating temperature range	-40°C to +125°C
High temperature stability	1000 hours @ 125°C, 0.5% ΔR
Insulation resistance	>10GΩ

RP308

Standard Resistance	Heat Dissipation mW/°C	Order Code	Price Each				
			1+	25+	100+	250+	1000+
1KΩ	9.0	732-278					
10KΩ	9.0	732-280					
1KΩ	5.0	732-291					
5.1KΩ	5.0	732-308					

NTC, Axial Lead



L = 6.4, Dia. = 2.3, Leads L = 38

These temperature sensing resistors are manufactured utilising thick film materials and techniques proven in the manufacture of precision resistors.

Standard resistance @ 25°C	1kΩ ± 2%
Temperature coefficient	0.3%/°C @ 25°C (3000 ppm/°C)
Resistance ratio	R25°C/R125°C = 1.37
Linearity	<1% deviation/100°C
Operating temperature range	-55°C to +175°C
High temperature stability	3000 hours @ 175°C, < 0.8%ΔR
Heat dissipation	8.1mW/°C
Time constant	7.4 secs.

RP309

Order Code	1+	25+	100+
143-584 †			
† Available until stocks are exhausted			

Carbon Skeleton Trimmers

0.1 Watt – POZ2 Series Ultra Small



H = 0.9, W = 2.1,
D = 2.7



- Ultra small SMD carbon trimmer compatible with automatic adjustment and reflow soldering
- Lead free construction with gold terminations, suitable for lead free applications/processes
- Special resin substrate withstands reflow solder process
- Trimming tool (KMPOT05) also available

Power rating @ 50°C	0.1W
Resistance tolerance	±30%
Maximum voltage	50V d.c.
Temperature coefficient	±500ppm/°C
Operating temperature	-25°C to +85°C
Rotation angle mechanical	240°±30°

Stocked in the following OHMIC Values:

500R = 353-1454	3K = 353-1480	20K = 353-1510	100K = 353-1545	500K = 353-1570
1K = 353-1466	5K = 353-1491	30K = 353-1521	200K = 353-1557	1M = 353-1582
2K = 353-1478	10K = 353-1508	50K = 353-1533	300K = 353-1569	

RP331

Order Multiple=5	Price Each				
Order Code	5+	50+	100+	500+	1000+
All Values					

0.1Watt – POZ3 Series



H = 1.8, W = 3.1,
D = 3.6



- Single turn carbon trimmer in 3.1 square SMD package
- Excellent solderability due to special plating technique used on terminators
- Substrate design prevents wicking of flux onto the top of the part
- Compatible with in-process automatic adjustment
- Trimming tool (KMPOT13T) also available

Power rating @ 50°C	0.1W
Resistance tolerance	±30%
Maximum voltage	50V d.c.
Temperature coefficient	±500ppm/°C
Operating temperature	-25°C to +85°C
Rotation angle mechanical	230°±10°

Stocked in the following OHMIC Values:

200R = 353-1594	2K = 353-1636	20K = 353-1673	200K = 353-1715	2M = 353-1752
300R = 353-1600	3K = 353-1648	30K = 353-1685	300K = 353-1727	
500R = 353-1612	5K = 353-1650	50K = 353-1697	500K = 353-1739	
1K = 353-1624	10K = 353-1661	100K = 353-1703	1M = 353-1740	

RP329

Order Multiple=5	Price Each				
Order Code	5+	50+	100+	500+	1000+
All Values					

0.05Watt – 3103 3mm Carbon Trimmer



H = 1.8, W = 3.6, L = 3.1



- Carbon on polyester with end stops
- Sealed for washing (note the seal is broken when trimmed).

Power rating @ 50°C	0.05W
Resistance tolerance	±30%
Maximum voltage	50V d.c.
Temperature coefficient	±500ppm/°C 25°C to 70°C ±750ppm/°C -20°C to 25°C
Operating temperature	-20°C to 70°C
Rotation electrical	260° ±20%