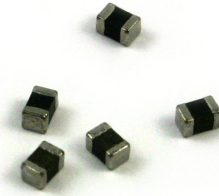


QT0805 PTC SERIES THERMISTORS

QTI's QT0805 surface mount PTC precision thermistors are the ideal solution for temperature compensation networks. The patented design features Leach Guard™ terminations which are able to withstand many of today's modern automated assembly and soldering processes. Contact QTI for information regarding our SMD engineering kit.



Ordering information: a. Product style
 QT0805 - 10 2 K
 a b c d b. First two significant digits
 c. Number of zeros
 d. Tolerance code

ENGINEERING INFORMATION

- Standard EIA 0805 package size
- Positive temperature coefficient: 0.7%/°C
- Operating temperature range: -55°C to 100°C
- Typical Dissipation Constant: 2.5mW/°C min. in still air
- Typical Time Constant: 30 seconds max in still air
- Power rating: 0.250 Watts at 25°C derated to 100°C
- Resistance values: 22 ohms to 36k ohms
- Available with gold or silver terminations
- Available waffle packed or tape and reel

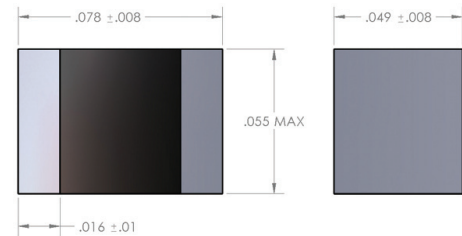


Table 1: Power derating curve

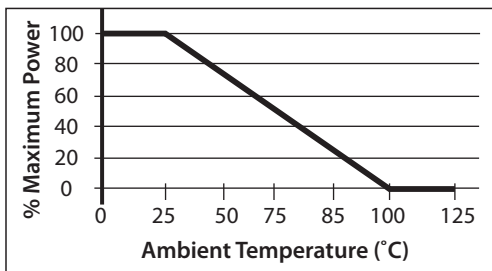


Table 2: Resistance tolerances at specified temps

Temp (°C)	F +/- %	G +/- %	J +/- %	K +/- %
-55°C	15	17	20	25
-15°C	9	10	13	18
0°C	3	4	7	12
25°C	1	2	5	10
50°C	3	4	7	12
75°C	5	6	9	14
100°C	7	9	12	17

Tolerance codes

Tin/lead terminations

- K: 10%
- J: 5%
- G: 2%
- F: 1%

Gold terminations

- E: 10%
- D: 5%
- C: 2%
- B: 1%

Table 3: Resistance multipliers at specified temperatures

Temperature	28-68 Ω	82 to 150 Ω	180 to 470 Ω	560 to 1200 Ω	1500 to 5600 Ω	6800 to 36k Ω
-55°C	0.490	0.500	0.500	0.500	0.500	0.490
-15°C	0.790	0.730	0.730	0.730	0.730	0.720
0°C	0.845	0.820	0.820	0.815	0.835	0.815
25°C	1.000	1.000	1.000	1.000	1.000	1.000
50°C	1.150	1.180	1.180	1.200	1.180	1.180
75°C	1.330	1.370	1.400	1.420	1.450	1.370
100°C	1.540	1.580	1.620	1.660	1.670	1.650*

* Multipliers must be characterized beyond 75°C to 90°C through calibration testing.

Dimensions

- L: 0.078" +/- 0.008"
- W: 0.049" +/- 0.008"
- T: 0.055" max
- BW: 0.016" +/- 0.010"

Don't see exactly what you need? Contact QTI to create a custom part for your application.

2108 Century Way Boise, Idaho 83709 USA
 T: (208) 377-3373, 800-554-4784
 F: (208) 376-4754
 qtisales@thermistor.com
 www.thermistor.com

