

PTC Military Grade Thermistors

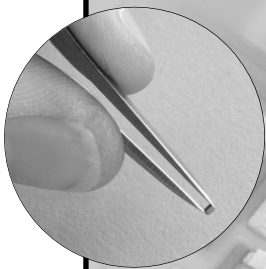
Military Grade Chip Thermistors

The High-Rel 03017 Positive Temperature Coefficient chip thermistor is designed for wire bonding applications found in hybrid circuitry. The devices exhibit a linear Resistance vs. Temperature curve approximating 0.7%/C which make them the ideal solution for temperature compensation applications.

DSCC (Defense Supply Center, Columbus) issued specification 03017 in the Spring of 2003 which dictates the performance and inspection requirements for these devices which includes a test for wire bonding integrity. Many leading Aerospace companies around the world have selected these components for their mission critical space flight applications.

Quality Thermistor has summarized the requirements of the 03017 specification on this catalog page. The complete detailed 03017 specification can be obtained by contacting the DSCC.

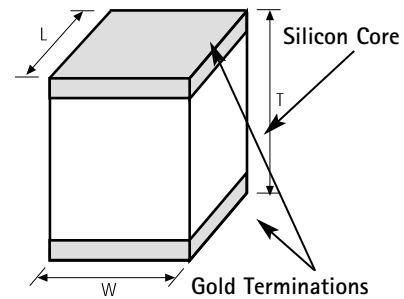
Quality Thermistor, Inc. is AS9100 certified



Engineering Information

Thermal time constant: 30 seconds max in still air
 Power rating: .125 W at 25 c, derate to 0 at 125
 Dissipation constant: 2.5mW/°C min in still air
 Resistance at 25C: 10 ohms to 10Kohms (see table)

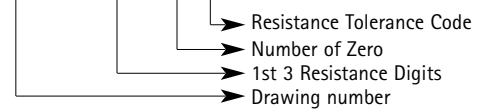
Standard Configuration



Dimension +/- .010(0.254)	10-12 OHMS	15-1800 OHMS	2200-4700 OHMS	5600 OHMS	10000 OHMS
L	0.032(0.812)	0.032(0.812)	0.038(0.965)	0.030(0.762)	0.022(0.558)
W	0.032(0.812)	0.032(0.812)	0.038(0.965)	0.030(0.762)	0.022(0.558)
T	0.028(0.711)	0.050(1.27)	0.072(1.828)	0.072(1.828)	0.072(1.828)

Ordering Information

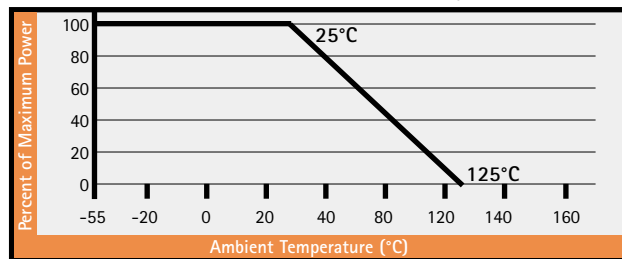
03017-510 2 J



Tolerance Code:

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

TABLE 1 Derating Curve for High Ambient Temperatures



PTC TABLE 1 Resistance multipliers for temperatures other than 25°C.

TEMPERATURE	10 TO 27 OHMS	33 TO 68 OHMS	82 TO 330 OHMS	390 TO 2700 OHMS	3300 TO 10000 OHMS
-55°C	0.552	0.519	0.493	0.481	0.493
-15°C	0.739	0.728	0.716	0.709	0.717
0°C	0.830	0.822	0.813	0.810	0.816
25°C	1.000	1.000	1.000	1.000	1.000
50°C	1.190	1.201	1.208	1.211	1.205
75°C	1.408	1.411	1.441	1.446	1.430
100°C	1.651	1.669	1.706	1.709	1.660
125°C	1.908	1.940	1.993	1.983	1.862