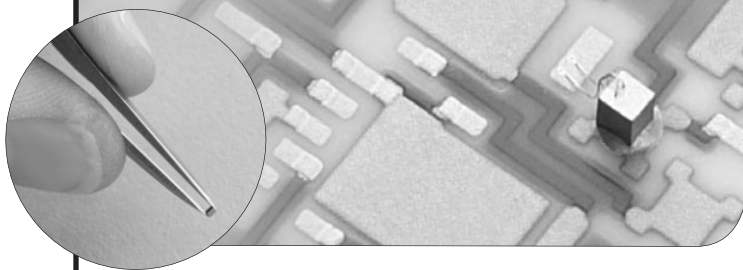


PTC Chip Thermistors

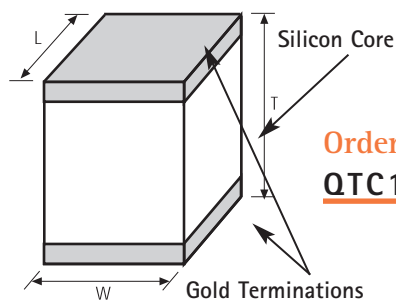
Standard PTC Thermistor Die

PTC Silicon Die thermistors are used in wire-bonding and specialized reflow-soldering applications.

Board attachment by either wire bonding, conductive epoxy, or a combination of both may be used. Solder attachment may be performed using different solder configurations, however, it is not recommended.



Standard Configuration



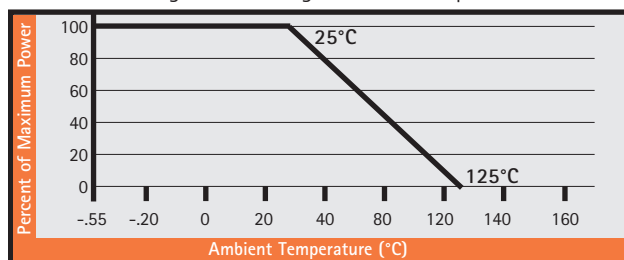
Ordering Information

QTC11-100K

→ Tolerance Code
→ Part Number

Tolerance:
K= 10% G= 2%
J= 5% F= 1%

TABLE 1 Derating Curve for High Ambient Temperatures



Engineering Information

*Dissipation Constant: See below
*Thermal Time Constant: See below
Resistance Coefficient: See PTC table 1
Power Rating: 0.0625 watts @ 25°C
derated to 125°C-See Table 1
Operating Range: -55°C to 125°C

RESISTANCE OHMS @ 25°C	PART NO.	L +/- .010	W +/- .010	T +/- .010	NOMINAL D.C.*	T.C.*
10	QTC11 -100	.032	.032	.028	2MW	8 sec.
12	-120	.032	.032	.028	2MW	8 sec.
15	-150	.032	.032	.050	2MW	8 sec.
18	-180	.032	.032	.050	2MW	8 sec.
22	-220	.032	.032	.050	2MW	8 sec.
27	-270	.032	.032	.050	2MW	8 sec.
33	-330	.0332	.032	.050	2MW	8 sec.
39	-390	.032	.032	.050	2MW	8 sec.
47	-470	.032	.032	.050	2MW	8 sec.
56	-560	.032	.032	.050	2MW	8 sec.
68	-680	.032	.032	.050	2MW	8 sec.
82	-820	.032	.032	.050	2MW	8 sec.
100	-101	.032	.032	.050	2MW	8 sec.
120	-121	.032	.032	.050	2MW	8 sec.
150	-151	.032	.032	.050	2MW	8 sec.
180	-181	.032	.032	.050	2MW	8 sec.
220	-221	.032	.032	.050	2MW	8 sec.
270	-271	.032	.032	.050	2MW	8 sec.
330	-331	.032	.032	.050	2MW	8 sec.
390	-391	.032	.032	.050	2MW	8 sec.
470	-471	.032	.032	.050	2MW	8 sec.
560	-561	.032	.032	.050	2MW	8 sec.
680	-681	.032	.032	.050	2MW	8 sec.
750	-751	.032	.032	.050	2MW	8 sec.
820	-821	.032	.032	.050	2MW	8 sec.
1000	-102	.032	.032	.050	2MW	8 sec.
1200	-122	.032	.032	.050	2MW	8 sec.
1500	-152	.032	.032	.050	2MW	8 sec.
1800	-182	.032	.032	.050	2MW	8 sec.
2200	-222	.038	.038	.072	2MW	8 sec.
2700	-272	.038	.038	.072	2MW	8 sec.
3300	-332	.038	.038	.072	2MW	8 sec.
3900	-392	.038	.038	.072	2MW	8 sec.
4700	-472	.038	.038	.072	2MW	8 sec.
5600	-562	.038	.038	.072	2MW	8 sec.
6800	-682	.038	.038	.072	2MW	8 sec.
8200	-822	.030	.030	.072	2MW	8 sec.
10000	-103	.022	.022	.072	2MW	8 sec.

*D.C. = Dissipation Constant MW/C

*T.C. = Time Constant Seconds in Free Air

PTC TABLE 1 Standard for RTH42 (MIL-PRF-23648/19) and QTG Series, QTC11, QTCH

TEMPERATURE	10 TO 68 OHMS	82 TO 150 OHMS	180 TO 470 OHMS	560 TO 1200 OHMS	1500 TO 5600 OHMS	6800 TO 10,000 OHMS
**(-55°C)	0.615	0.582	0.560	0.550	0.515	0.510
-15°C	0.790	0.770	0.755	0.740	0.730	0.730
0°C	0.863	0.847	0.838	0.835	0.825	0.825
25°C	1.000	1.000	1.000	1.000	1.000	1.000
50°C	1.160	1.170	1.180	1.200	1.230	1.190
75°C	1.350	1.370	1.400	1.420	1.450	1.400
100°C	1.545	1.584	1.623	1.656	1.670	1.610
**(125°C)	1.750	1.800	1.860	1.920	1.960	1.830

**Multipliers applicable to military grade only.