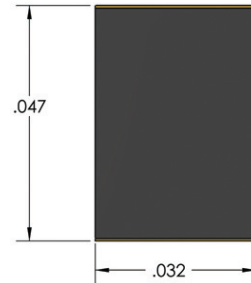


QTC11 PTC THERMISTOR DIE



PTC silicon die thermistors are common in wire-bonding and specialized reflow-soldering applications. Wire bonding, conductive epoxy or a combination of both may be used for board attachment. Solder attachment may be performed using different solder configurations, however, it is not recommended.

Ordering information:
 a. Part number Tolerances:
 QTC11 - 100 K K: 10% G: 2%
 b J: 5% F: 1%



ENGINEERING INFORMATION

- Part size: 0.032" by 0.032" square
- Part thickness: 0.028", 0.050" or 0.072"
- Positive temperature coefficient: 0.7%/°C
- Operating temperature range: -55°C to 125°C
- Typical Dissipation Constant: 2mW/°C min. in still air
- Typical Time Constant: 8 seconds max in still air
- Tolerances: 1%, 2%, 5%, 10%
- Power rating: 0.0625 W at 25°C, derate to 0 W at 125°C (Table 2)
- Resistance values from 10 ohms to 10k ohms
- Available with gold terminations
- Board attachment by either wire bonding or conductive epoxy
- RoHS compliant
- Available waffle packed or tape and reel

Table 2: Derating curve for high ambient temps

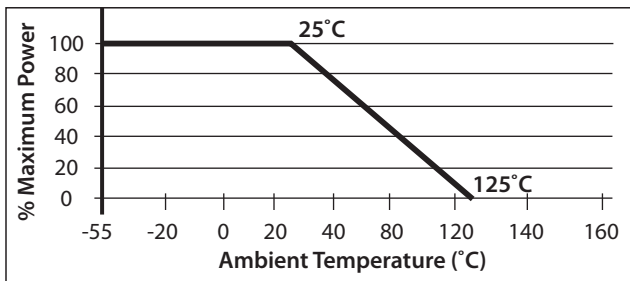


Table 3: Resistance multipliers at specified temperature

Temp (°C)	10-68 Ω	82-150 Ω	180-470 Ω	560-1200 Ω	1500-5600 Ω	6800-10k Ω
*-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.

Table 1: Part dimensions

All nominal Dissipation Constants: 2mW/C
 All nominal Time Constants: 8 seconds in still air

R @ 25°C (Ω)	Part No.	L +/- .01	W +/- .01	T +/- .01
10	-100	.032	.032	.028
12	-120	.032	.032	.028
15	-150	.032	.032	.050
18	-180	.032	.032	.050
22	-220	.032	.032	.050
27	-270	.032	.032	.050
33	-330	.032	.032	.050
39	-390	.032	.032	.050
47	-470	.032	.032	.050
56	-560	.032	.032	.050
68	-680	.032	.032	.050
82	-820	.032	.032	.050
100	-101	.032	.032	.050
120	-121	.032	.032	.050
150	-151	.032	.032	.050
180	-181	.032	.032	.050
220	-221	.032	.032	.050
270	-271	.032	.032	.050
330	-331	.032	.032	.050
390	-391	.032	.032	.050
470	-471	.032	.032	.050
560	-561	.032	.032	.050
680	-681	.032	.032	.050
750	-751	.032	.032	.050
820	-821	.032	.032	.050
1000	-102	.032	.032	.050
1200	-122	.032	.032	.050
1500	-152	.032	.032	.050
1800	-182	.032	.032	.050
2200	-222	.038	.038	.072
2700	-272	.038	.038	.072
3300	-332	.038	.038	.072
3900	-392	.038	.038	.072
4700	-472	.038	.038	.072
5600	-562	.038	.038	.072
6800	-682	.038	.038	.072
8200	-822	.030	.030	.072
10,000	-103	.022	.022	.072

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

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