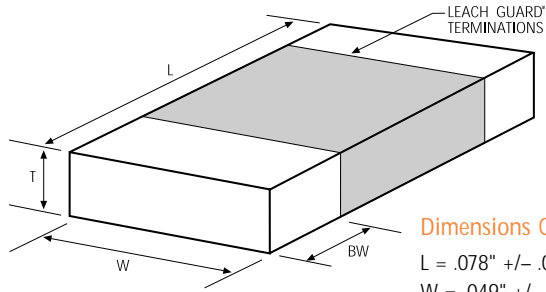


PTC Surface Mount Thermistors

QT0805 Series

QTTM brand PTC Surface Mount Thermistors exhibit a stable, proportional and linear resistance vs. temperature signal approximating 0.7% / °C.

The QT0805 is commonly designed into applications requiring precision, narrow band, temperature point matched control or broader temperature range circuit compensation. Consistent component geometry with Quality Thermistor's reliable, full wrap-around Leach Guard termination facilitates trouble-free, automated board placement. R25 °C values from 22 ohm through 36K ohm offer circuit design flexibility.



Dimensions QT0805 STYLE

L = .078" +/- .008"
 W = .049" +/- .008"
 T = .055" Max
 BW = .016" +/- .010"

Engineering Information

Positive Temperature Coefficient: .7%/C
 Operating Temperature Range: -55C to +100C
 Storage Temperature: -65C to +150C
 Thermal Time Constant: 30 Seconds max.-Still Air
 Dissipation Constant: 2.5 mW/C min.-Still Air
 Power Rating: 0.250 Watts @ 25C derated to 100C (Table 1)



TABLE 1 Power Derating Curve

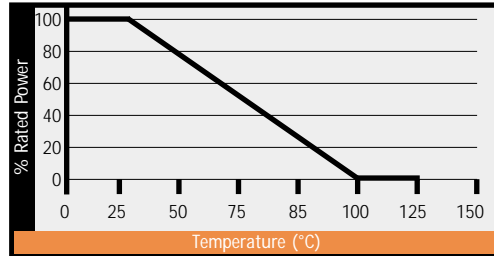


TABLE 2 Resistance Multipliers at Specified Temperature

TEMP. DEG. C	22-68 OHMS	82-150 OHMS	180-470 OHMS	560-1200 OHMS	1500-5600 OHMS	6800-36K OHMS
-55	.490	.500	.500	.500	.500	.490
-15	.790	.730	.730	.730	.730	.720
0	.845	.820	.820	.815	.835	.815
25	1.000	1.000	1.000	1.000	1.000	1.000
50	1.150	1.180	1.180	1.200	1.180	1.18
75	1.330	1.370	1.400	1.420	1.450	1.370
100	1.540	1.580	1.620	1.660	1.670	(1.650)

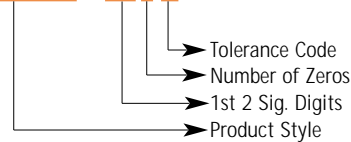
* Multipliers in parentheses must be characterized beyond 75C to 90C through calibration testing.

TABLE 3 Resistance Tolerances at Specified Temperatures

TEMP. DEG. C	F +/- %	G +/- %	J +/- %	K +/- %\
-55	15	17	20	25
-15	9	10	13	18
0	3	4	7	12
25	1	2	5	10
50	3	4	7	12
75	5	6	9	14
100	7	9	12	17

Ordering Information

QT0805 - 102K



Tolerance Code:

K = 10% with Tin/Lead Terminations E = 10% with Gold Terminations
 J = 5% with Tin/Lead Terminations D = 5% with Gold Terminations
 G = 2% with Tin/Lead Terminations C = 2% with Gold Terminations
 F = 1% with Tin/Lead Terminations B = 1% with Gold Terminations