

STEINHART-HART COEFFICIENTS FOR QTI CURVES AND RESISTANCE VALUES



Below are resistance to temperature calculations for QTI's curves.

10k Ohm Curve Z, -55°C to 150°C

A = 0.001116401465500
B = 0.000237982973213
C = -0.000000372283234
D = 0.000000099063233

QTLC-82C3, 10k Curve S, -55°C to 150°C

A = 0.001044054703604
B = 0.000234368328566
C = 0.000000490829151
D = 0.000000140419949

5k Ohm Curve Z, -55°C to 150°C

A = 0.001281212818301
B = 0.000237609664752
C = -0.000000166287031
D = 0.000000099063233

10k Curve Y, -55°C to 150°C

A = 0.000661913453349
B = 0.000326726406677
C = -0.000007107372384
D = 0.000000366599672

20k Ohm Curve Y, -55°C to 150°C

A = 0.000431907120535
B = 0.000337107718688
C = -0.000007869694972
D = 0.000000366599672

5k Curve Y, -55°C to 150°C

A = 0.000885090269197
B = 0.000317401898171
C = -0.000006345049796
D = 0.000000366599672

50k Ohm Curve Z, -55°C to 150°C

A = 0.000729098047470
B = 0.000240891909594
C = -0.000000947215537
D = 0.000000102167170

2252 Ohm Curve Z, -55°C to 150°C

A = 0.001470679327206
B = 0.000237533468307
C = 0.000000070757179
D = 0.000000099063233

QTHT-2, 100°C to 200°C

A = 0.002655455841542
B = -0.000407029261871
C = 0.000054569317868
D = -0.000001728981535

QTHT-1, 100°C to 200°C

A = 0.00110126635981103
B = 0.00005860841593385
C = 0.00001165773110995
D = -0.00000034198254932

Steinhart-Hart Equation

$$c := -273.15 + \left[\frac{1}{(A_{val}) + B_{val} \cdot \ln(r) + C_{val} \cdot \ln(r)^2 + D_{val} \cdot \ln(r)^3} \right]$$