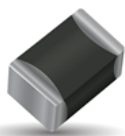


NTC SMD Thermistor with Ni/Sn termination

for Automotive, Industrial and General applications

To view data online visit:
SpiCAT



KYOCERA AVX Chip NTC Thermistors are high quality devices developed especially for surface mounting applications. They are widely used for temperature compensation, but can also achieve temperature control of printed circuits in a wide range of applications, including automotive, industrial and general purpose. Ni barrier/100% Sn plated termination for lead free soldering.

Characteristics

Case Size	0805
Operating temperature	-55°C to +150°C
Resistance	27 kOhm
Tolerance on Resistance (25°C)	$\pm 5\%$
B 25/85	3950K $\pm 3\%$
Maximum dissipation at 25°C	0.12 W
Thermal dissipation factor	2 mW/°C
Thermal time constant	5 s
Termination	Ni barrier/100%Sn (for Pb free soldering)



MSL 1
Pb Free
260°C

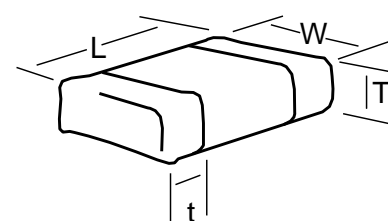


AEC-Q200
based qualification







Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0805	2.0 ± 0.3	1.25 ± 0.2	1.3 max	0.2 min
	(0.079 ± 0.012)	(0.049 ± 0.008)	(0.051) max	(0.008) min



How to Order (Packaging options)

NB  Type NB = Ni/Sn Term for lead free soldering	12  Size 12 = 0805	M0  Material Code See Datasheet	0273  Resistance (Ohm) 2 Sig. Digits + Number of Zeros	J  Tolerance H = $\pm 3\%$ * J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	BB  Suffix: Packaging BB = Cardboard tape (180mm reel, 4,000 pcs/reel) BF = Cardboard tape (180mm reel, 2,000 pcs/reel) BD = Cardboard tape (330mm reel, 10,000 pcs/reel) -- = Bulk (5000 pcs/bag)
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* For selected PNs

NOTICE: Specifications are subject to change without notice. All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee or responsibility of any kind, expressed or implied. Specifications are typical and may not apply to all applications.

Material Table

M0 (B25/85 = 3950K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	99.59	15.64	-7.42
-50	68.97	14.25	-7.16
-45	48.40	12.94	-6.91
-40	34.38	11.69	-6.67
-35	24.71	10.51	-6.45
-30	17.97	9.39	-6.23
-25	13.20	8.33	-6.02
-20	9.804	7.31	-5.82
-15	7.352	6.35	-5.63
-10	5.565	5.43	-5.45
-5	4.251	4.55	-5.28
0	3.275	3.70	-5.11
5	2.544	2.90	-4.95
10	1.992	2.13	-4.80
15	1.572	1.39	-4.65
20	1.249	0.68	-4.51
25	1.000	0.00	-4.38
30	0.8057	0.66	-4.25
35	0.6534	1.30	-4.12
40	0.5331	1.92	-4.00
45	0.4376	2.53	-3.89
50	0.3612	3.12	-3.77
55	0.2998	3.70	-3.67
60	0.2501	4.26	-3.57
65	0.2097	4.81	-3.47
70	0.1767	5.35	-3.37
75	0.1496	5.87	-3.28
80	0.1272	6.38	-3.19
85	0.1087	6.88	-3.11
90	0.0932	7.37	-3.03
95	0.0803	7.84	-2.95
100	0.0694	8.31	-2.87
105	0.0602	8.76	-2.80
110	0.0524	9.21	-2.73
115	0.0458	9.64	-2.66
120	0.0402	10.07	-2.60
125	0.0353	10.48	-2.53
130	0.0312	10.89	-2.47
135	0.0276	11.29	-2.41
140	0.0245	11.68	-2.36
145	0.0218	12.06	-2.30
150	0.0194	12.43	-2.25

B25/50	B25/75	B25/85	B25/100	B Tol
3925 K	3944 K	3950 K	3958 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
2,133,998	2,688,936	3,243,873
1,503,803	1,862,309	2,220,816
1,072,276	1,306,668	1,541,060
773,275	928,242	1,083,209
563,735	667,260	770,785
415,276	485,105	554,933
308,984	356,503	404,021
232,111	264,710	297,308
175,973	198,500	221,026
134,595	150,261	165,927
103,820	114,776	125,732
80,735	88,432	96,129
63,274	68,700	74,127
49,962	53,796	57,630
39,734	42,446	45,158
31,819	33,735	35,652
25,650	27,000	28,350
20,524	21,754	22,985
16,530	17,641	18,752
13,397	14,394	15,390
10,924	11,814	12,703
8,959.7	9,751.8	10,544
7,389.6	8,093.7	8,797.8
6,127.4	6,752.9	7,378.4
5,107.0	5,662.7	6,218.3
4,277.8	4,771.6	5,265.4
3,600.4	4,039.6	4,478.7
3,044.3	3,435.2	3,826.2
2,585.4	2,934.0	3,282.6
2,205.2	2,516.4	2,827.6
1,888.6	2,166.9	2,445.1
1,623.9	1,873.1	2,122.4
1,401.6	1,625.3	1,848.9
1,214.2	1,415.3	1,616.3
1,055.6	1,236.7	1,417.8
920.9	1,084.3	1,247.6
806.1	953.7	1,101.4
707.8	841.5	975.2
623.5	744.8	866.0
550.8	661.0	771.3
488.0	588.4	688.7
433.6	525.1	616.7