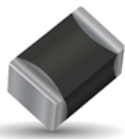


NTC SMD Thermistor with Ni/Sn termination

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	0603
Operating temperature	-55°C to +150°C
Resistance	22 kOhm
Tolerance on Resistance (25°C)	$\pm 3\%$
B 25/85	3790K $\pm 3\%$
Maximum dissipation at 25°C	0.07 W
Thermal dissipation factor	1 mW/°C
Thermal time constant	4 s
Termination	Ni barrier/100%Sn (for Pb free soldering)



MSL 1
Pb Free
260°C

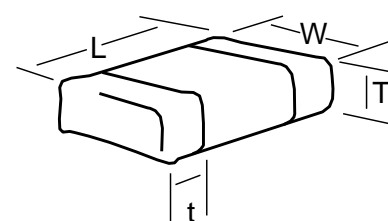


AEC-Q200
based qualification

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0603	1.6 ± 0.2	0.8 ± 0.2	1.0 max	0.2 min
	(0.063 ± 0.008)	(0.031 ± 0.008)	(0.039) max	(0.008) min



How to Order (Packaging options)

NB	21	L0	0223	H	--
Type	Size	Material Code	Resistance (Ohm)	Tolerance	Suffix: Packaging
NB = Ni/Sn Term for lead free soldering	21 = 0603	See Datasheet	2 Sig. Digits + Number of Zeros	H = $\pm 3\%*$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	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)

* 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

L0 (B25/85 = 3790K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	82.54	22.30	-7.12
-50	58.03	19.27	-6.87
-45	41.31	16.57	-6.63
-40	29.75	14.16	-6.40
-35	21.68	12.03	-6.18
-30	15.97	10.14	-5.98
-25	11.88	8.46	-5.78
-20	8.931	6.99	-5.59
-15	6.777	5.69	-5.40
-10	5.188	4.55	-5.23
-5	4.007	3.56	-5.06
0	3.120	2.70	-4.90
5	2.449	1.96	-4.75
10	1.937	1.33	-4.60
15	1.543	0.80	-4.46
20	1.238	0.36	-4.33
25	1.000	0.00	-4.20
30	0.8128	0.35	-4.07
35	0.6648	0.74	-3.95
40	0.5469	1.17	-3.84
45	0.4525	1.65	-3.73
50	0.3764	2.16	-3.62
55	0.3148	2.69	-3.52
60	0.2646	3.26	-3.42
65	0.2235	3.85	-3.33
70	0.1896	4.46	-3.24
75	0.1616	5.09	-3.15
80	0.1383	5.73	-3.07
85	0.1189	6.39	-2.98
90	0.1026	7.06	-2.91
95	0.0889	7.74	-2.83
100	0.0773	8.43	-2.76
105	0.0674	9.13	-2.69
110	0.0590	9.83	-2.62
115	0.0519	10.54	-2.56
120	0.0457	11.25	-2.49
125	0.0404	11.97	-2.43
130	0.0358	12.69	-2.37
135	0.0319	13.41	-2.32
140	0.0284	14.13	-2.26
145	0.0254	14.85	-2.21
150	0.0228	15.57	-2.16

B25/50	B25/75	B25/85	B25/100	B Tol
3765 K	3784 K	3790 K	3798 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
1,356,516	1,815,946	2,275,376
992,351	1,276,600	1,560,848
730,927	908,718	1,086,509
542,252	654,599	766,945
405,255	476,932	548,609
305,129	351,276	397,422
231,454	261,421	291,387
176,864	196,485	216,107
136,132	149,084	162,035
105,528	114,146	122,763
82,374	88,155	93,937
64,737	68,649	72,561
51,212	53,885	56,557
40,773	42,618	44,463
32,664	33,953	35,243
26,325	27,240	28,154
21,340	22,000	22,660
17,284	17,883	18,481
14,079	14,625	15,172
11,530	12,032	12,535
9,493	9,955	10,418
7,855	8,282	8,709
6,531	6,926	7,320
5,457	5,821	6,185
4,579	4,916	5,253
3,860	4,171	4,482
3,268	3,555	3,843
2,777	3,043	3,309
2,370	2,616	2,861
2,030	2,257	2,484
1,745	1,955	2,165
1,506	1,700	1,895
1,304	1,484	1,664
1,132	1,299	1,466
986.8	1,141	1,296
862.5	1,006	1,149
756.2	889.3	1,022
664.9	788.6	912.3
586.2	701.3	816.4
518.3	625.4	732.5
459.4	559.2	659.1
408.3	501.4	594.5