

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	1206
Operating temperature	-55°C to +150°C
Resistance	12 kOhm
Tolerance on Resistance (25°C)	$\pm 3\%$
B 25/85	3630K $\pm 3\%$
Maximum dissipation at 25°C	0.24 W
Thermal dissipation factor	4 mW/°C
Thermal time constant	7 s
Termination	Ni barrier/100%Sn (for Pb free soldering)



MSL 1
Pb Free
260°C



AEC-Q200
based qualification

Dimensions WWWW

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
1206	3.2 ± 0.4	1.6 ± 0.25	1.5 max	0.2 min
	(0.126 ± 0.016)	(0.063 ± 0.01)	(0.059) max	(0.008) min



How to Order (Packaging options)

NB	20	K0	0123	H	BE
Type	Size	Material Code	Resistance (Ohm)	Tolerance	Suffix: Packaging
NB = Ni/Sn Term for lead free soldering	20 = 1206	See Datasheet	2 Sig. Digits + Number of Zeros	H = $\pm 3\%*$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	BA = Plastic tape (180mm reel, 3,000 pcs/reel) BE = Plastic tape (180mm reel, 1,500 pcs/reel) BC = Plastic 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

K0 (B25/85 = 3630K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	56.27	21.36	-6.25
-50	41.22	18.45	-6.06
-45	30.48	15.86	-5.89
-40	22.74	13.56	-5.71
-35	17.11	11.52	-5.55
-30	12.98	9.71	-5.39
-25	9.931	8.10	-5.24
-20	7.655	6.69	-5.09
-15	5.945	5.45	-4.95
-10	4.651	4.36	-4.81
-5	3.663	3.41	-4.67
0	2.905	2.58	-4.54
5	2.319	1.88	-4.42
10	1.862	1.27	-4.30
15	1.505	0.77	-4.18
20	1.223	0.34	-4.07
25	1.000	0.00	-3.96
30	0.8219	0.33	-3.85
35	0.6792	0.71	-3.75
40	0.5641	1.12	-3.65
45	0.4708	1.58	-3.55
50	0.3949	2.07	-3.46
55	0.3327	2.58	-3.37
60	0.2816	3.12	-3.28
65	0.2393	3.69	-3.20
70	0.2043	4.27	-3.12
75	0.1751	4.87	-3.04
80	0.1506	5.49	-2.96
85	0.1301	6.12	-2.89
90	0.1128	6.76	-2.82
95	0.0981	7.41	-2.75
100	0.0856	8.07	-2.68
105	0.0750	8.74	-2.61
110	0.0659	9.42	-2.55
115	0.0581	10.09	-2.49
120	0.0514	10.78	-2.43
125	0.0455	11.46	-2.37
130	0.0405	12.15	-2.32
135	0.0361	12.84	-2.26
140	0.0323	13.53	-2.21
145	0.0289	14.22	-2.16
150	0.0260	14.91	-2.11

B25/50	B25/75	B25/85	B25/100	B Tol
3581 K	3618 K	3630 K	3646 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
510,767	675,226	839,685
388,533	494,637	600,740
296,740	365,732	434,724
227,660	272,854	318,047
175,513	205,326	235,139
136,001	155,800	175,599
105,938	119,172	132,406
82,961	91,863	100,765
65,317	71,343	77,369
51,702	55,807	59,913
41,143	43,960	46,776
32,914	34,861	36,807
26,468	27,825	29,182
21,394	22,349	23,304
17,380	18,060	18,740
14,189	14,680	15,171
11,640	12,000	12,360
9,534.7	9,863.3	10,192
7,847.9	8,150.0	8,452.2
6,489.7	6,768.9	7,048.1
5,391.0	5,649.7	5,908.4
4,498.2	4,738.2	4,978.2
3,769.4	3,992.2	4,215.0
3,171.9	3,378.7	3,585.5
2,679.9	2,871.9	3,063.9
2,273.2	2,451.4	2,629.6
1,935.6	2,100.9	2,266.3
1,654.2	1,807.6	1,961.1
1,418.9	1,561.2	1,703.6
1,221.2	1,353.3	1,485.4
1,054.7	1,177.3	1,299.9
913.9	1,027.7	1,141.5
794.4	900.1	1,005.8
692.7	790.9	889.1
605.8	697.1	788.4
531.4	616.3	701.2
467.4	546.5	625.5
412.3	485.9	559.5
364.6	433.3	501.9
323.3	387.4	451.4
287.4	347.2	407.0
256.1	312.0	367.8