

NTC SMD Thermistor with AgPdPt termination

for Automotive, Industrial and General applications

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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. AgPdPt termination termination for conductive adhesive assembly (not suitable for lead free soldering - use NB series).

Characteristics

Case Size	0603
Operating temperature	-55°C to +150°C
Resistance	68 kOhm
Tolerance on Resistance (25°C)	$\pm 5\%$
B 25/85	4080K $\pm 3\%$
Maximum dissipation at 25°C	0.07 W
Thermal dissipation factor	1 mW/°C
Thermal time constant	4 s
Termination	AgPdPt (for conductive adhesive)



MSL 1



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)

NC
Type
NC = AgPdPt for conductive adhesive

21
Size
21 = 0603

N0
Material Code
See Datasheet

0683
Resistance (Ohm)
2 Sig. Digits + Number of Zeros

J
Tolerance
H = $\pm 3\%*$
J = $\pm 5\%$
K = $\pm 10\%$
M = $\pm 20\%$

* For selected PNs

BD
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)

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

N0 (B25/85 = 4080K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	110.1	24.01	-7.50
-50	75.89	20.74	-7.25
-45	52.97	17.83	-7.01
-40	37.42	15.25	-6.78
-35	26.75	12.95	-6.56
-30	19.33	10.91	-6.35
-25	14.11	9.11	-6.14
-20	10.41	7.52	-5.95
-15	7.758	6.12	-5.76
-10	5.834	4.90	-5.58
-5	4.426	3.83	-5.41
0	3.387	2.91	-5.24
5	2.614	2.11	-5.08
10	2.033	1.43	-4.93
15	1.593	0.86	-4.78
20	1.258	0.39	-4.64
25	1.000	0.00	-4.51
30	0.8004	0.37	-4.37
35	0.6449	0.80	-4.25
40	0.5228	1.26	-4.13
45	0.4264	1.77	-4.01
50	0.3497	2.32	-3.90
55	0.2885	2.90	-3.79
60	0.2392	3.51	-3.68
65	0.1994	4.14	-3.58
70	0.1671	4.80	-3.49
75	0.1406	5.48	-3.39
80	0.1189	6.17	-3.30
85	0.1010	6.88	-3.22
90	0.0862	7.60	-3.13
95	0.0738	8.33	-3.05
100	0.0635	9.08	-2.97
105	0.0548	9.83	-2.90
110	0.0475	10.58	-2.83
115	0.0413	11.35	-2.76
120	0.0360	12.11	-2.69
125	0.0315	12.89	-2.62
130	0.0277	13.66	-2.56
135	0.0244	14.43	-2.50
140	0.0216	15.21	-2.44
145	0.0191	15.98	-2.38
150	0.0170	16.76	-2.33

B25/50	B25/75	B25/85	B25/100	B Tol
4049 K	4072 K	4080 K	4090 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
5,315,009	7,486,619	9,658,229
3,832,135	5,160,477	6,488,819
2,779,657	3,602,127	4,424,597
2,029,591	2,544,834	3,060,077
1,492,283	1,818,736	2,145,189
1,105,120	1,314,253	1,523,386
824,378	959,815	1,095,252
619,455	708,117	796,778
468,858	527,533	586,209
357,426	396,689	435,953
274,405	300,983	327,560
212,130	230,339	248,548
165,101	177,737	190,373
129,348	138,239	147,129
101,991	108,340	114,689
80,924	85,531	90,137
64,600	68,000	71,400
51,505	54,429	57,353
41,309	43,850	46,391
33,321	35,548	37,775
27,028	28,992	30,956
22,041	23,782	25,523
18,067	19,617	21,167
14,884	16,268	17,653
12,321	13,561	14,801
10,247	11,360	12,474
8,561	9,563	10,564
7,183	8,086	8,990
6,053	6,869	7,684
5,121	5,859	6,597
4,350	5,019	5,688
3,709	4,316	4,924
3,174	3,726	4,279
2,726	3,229	3,732
2,349	2,808	3,267
2,031	2,450	2,869
1,762	2,145	2,529
1,533	1,884	2,236
1,338	1,660	1,983
1,171	1,467	1,764
1,028	1,301	1,573
904.5	1,156	1,408