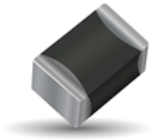
NB21N00683JBB

(0603, 68 kOhm ±5%, 4080K, Ni/100% Sn)

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	68 kOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	4080K±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)

RoHS COMPLIANT

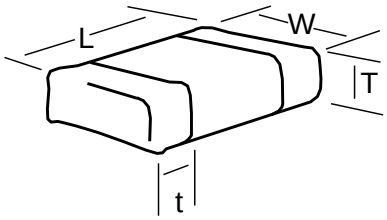
MSL 1
Pb Free
260°C

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	N0	0683	J	BB
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 = ±3%* J = ±5% K = ±10% M = ±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 beleived 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±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4049 K	4072 K	4080 K	4090 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	110.1	24.01	-7.50	5,315,009	7,486,619	9,658,229
-50	75.89	20.74	-7.25	3,832,135	5,160,477	6,488,819
-45	52.97	17.83	-7.01	2,779,657	3,602,127	4,424,597
-40	37.42	15.25	-6.78	2,029,591	2,544,834	3,060,077
-35	26.75	12.95	-6.56	1,492,283	1,818,736	2,145,189
-30	19.33	10.91	-6.35	1,105,120	1,314,253	1,523,386
-25	14.11	9.11	-6.14	824,378	959,815	1,095,252
-20	10.41	7.52	-5.95	619,455	708,117	796,778
-15	7.758	6.12	-5.76	468,858	527,533	586,209
-10	5.834	4.90	-5.58	357,426	396,689	435,953
-5	4.426	3.83	-5.41	274,405	300,983	327,560
0	3.387	2.91	-5.24	212,130	230,339	248,548
5	2.614	2.11	-5.08	165,101	177,737	190,373
10	2.033	1.43	-4.93	129,348	138,239	147,129
15	1.593	0.86	-4.78	101,991	108,340	114,689
20	1.258	0.39	-4.64	80,924	85,531	90,137
25	1.000	0.00	-4.51	64,600	68,000	71,400
30	0.8004	0.37	-4.37	51,505	54,429	57,353
35	0.6449	0.80	-4.25	41,309	43,850	46,391
40	0.5228	1.26	-4.13	33,321	35,548	37,775
45	0.4264	1.77	-4.01	27,028	28,992	30,956
50	0.3497	2.32	-3.90	22,041	23,782	25,523
55	0.2885	2.90	-3.79	18,067	19,617	21,167
60	0.2392	3.51	-3.68	14,884	16,268	17,653
65	0.1994	4.14	-3.58	12,321	13,561	14,801
70	0.1671	4.80	-3.49	10,247	11,360	12,474
75	0.1406	5.48	-3.39	8,561	9,563	10,564
80	0.1189	6.17	-3.30	7,183	8,086	8,990
85	0.1010	6.88	-3.22	6,053	6,869	7,684
90	0.0862	7.60	-3.13	5,121	5,859	6,597
95	0.0738	8.33	-3.05	4,350	5,019	5,688
100	0.0635	9.08	-2.97	3,709	4,316	4,924
105	0.0548	9.83	-2.90	3,174	3,726	4,279
110	0.0475	10.58	-2.83	2,726	3,229	3,732
115	0.0413	11.35	-2.76	2,349	2,808	3,267
120	0.0360	12.11	-2.69	2,031	2,450	2,869
125	0.0315	12.89	-2.62	1,762	2,145	2,529
130	0.0277	13.66	-2.56	1,533	1,884	2,236
135	0.0244	14.43	-2.50	1,338	1,660	1,983
140	0.0216	15.21	-2.44	1,171	1,467	1,764
145	0.0191	15.98	-2.38	1,028	1,301	1,573
150	0.0170	16.76	-2.33	904.5	1,156	1,408