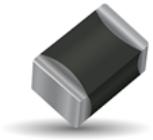
NB21J50682MBD

(0603, 6800 Ohm ±20%, 3480K, 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	6800 Ohm
Tolerance on Resistance (25°C)	±20%
B 25/85	3480K±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

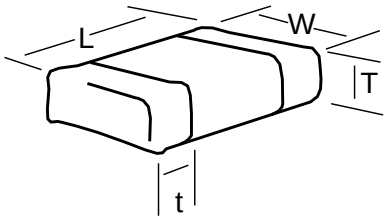
MSL 1
Pb Free
260°C

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	J5	0682	M	BD
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

J5 (B25/85 = 3480K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3443 K	3471 K	3480 K	3492 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	51.75	20.47	-6.23	209,473	351,908	494,343
-50	37.98	17.69	-6.03	160,918	258,252	355,586
-45	28.15	15.21	-5.84	124,029	191,431	258,833
-40	21.07	13.00	-5.65	95,986	143,270	190,555
-35	15.91	11.04	-5.48	74,623	108,219	141,815
-30	12.13	9.31	-5.31	58,300	82,469	106,638
-25	9.321	7.77	-5.15	45,781	63,382	80,984
-20	7.222	6.41	-4.99	36,139	49,112	62,084
-15	5.640	5.22	-4.84	28,680	38,353	48,027
-10	4.438	4.18	-4.69	22,882	30,178	37,474
-5	3.517	3.27	-4.55	18,353	23,918	29,483
0	2.807	2.48	-4.42	14,798	19,089	23,380
5	2.255	1.80	-4.29	11,994	15,337	18,680
10	1.824	1.22	-4.17	9,770	12,402	15,034
15	1.484	0.73	-4.05	7,999	10,091	12,183
20	1.215	0.33	-3.93	6,581	8,260	9,939
25	1.000	0.00	-3.82	5,440	6,800	8,160
30	0.8278	0.32	-3.71	4,485	5,629	6,773
35	0.6889	0.68	-3.61	3,716	4,685	5,653
40	0.5763	1.08	-3.51	3,093	3,919	4,745
45	0.4845	1.51	-3.41	2,586	3,294	4,003
50	0.4092	1.98	-3.32	2,171	2,783	3,394
55	0.3472	2.47	-3.23	1,831	2,361	2,892
60	0.2960	2.99	-3.15	1,550	2,013	2,475
65	0.2533	3.53	-3.06	1,317	1,723	2,128
70	0.2177	4.09	-2.98	1,124	1,481	1,837
75	0.1879	4.67	-2.90	962.5	1,278	1,593
80	0.1628	5.26	-2.83	827.2	1,107	1,386
85	0.1415	5.87	-2.76	713.4	962.4	1,211
90	0.1235	6.48	-2.69	617.4	839.7	1,062
95	0.1081	7.11	-2.62	536.0	735.3	934.6
100	0.0950	7.74	-2.55	466.8	645.9	825.1
105	0.0837	8.38	-2.49	407.7	569.3	730.9
110	0.0740	9.03	-2.43	357.2	503.3	649.4
115	0.0656	9.68	-2.37	313.9	446.3	578.8
120	0.0584	10.33	-2.31	276.5	396.9	517.4
125	0.0521	10.99	-2.26	244.3	354.0	463.7
130	0.0466	11.65	-2.21	216.4	316.6	416.8
135	0.0417	12.31	-2.15	192.2	283.9	375.6
140	0.0375	12.97	-2.10	171.1	255.2	339.3
145	0.0338	13.63	-2.06	152.6	230.0	307.3
150	0.0305	14.29	-2.01	136.5	207.7	279.0