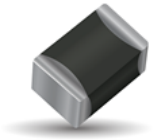
NB21J50682J--

(0603, 6800 Ohm ±5%, 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)	±5%
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

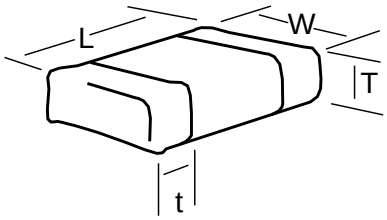
MSL 1
Pb Free
260°C

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	J	--
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	262,260	351,908	441,557
-50	37.98	17.69	-6.03	199,656	258,252	316,848
-45	28.15	15.21	-5.84	152,744	191,431	230,119
-40	21.07	13.00	-5.65	117,476	143,270	169,064
-35	15.91	11.04	-5.48	90,856	108,219	125,582
-30	12.13	9.31	-5.31	70,670	82,469	94,268
-25	9.321	7.77	-5.15	55,288	63,382	71,476
-20	7.222	6.41	-4.99	43,506	49,112	54,717
-15	5.640	5.22	-4.84	34,433	38,353	42,274
-10	4.438	4.18	-4.69	27,409	30,178	32,948
-5	3.517	3.27	-4.55	21,941	23,918	25,895
0	2.807	2.48	-4.42	17,661	19,089	20,516
5	2.255	1.80	-4.29	14,294	15,337	16,380
10	1.824	1.22	-4.17	11,631	12,402	13,174
15	1.484	0.73	-4.05	9,513	10,091	10,670
20	1.215	0.33	-3.93	7,820	8,260	8,700
25	1.000	0.00	-3.82	6,460	6,800	7,140
30	0.8278	0.32	-3.71	5,330	5,629	5,928
35	0.6889	0.68	-3.61	4,419	4,685	4,951
40	0.5763	1.08	-3.51	3,681	3,919	4,157
45	0.4845	1.51	-3.41	3,080	3,294	3,509
50	0.4092	1.98	-3.32	2,588	2,783	2,977
55	0.3472	2.47	-3.23	2,185	2,361	2,538
60	0.2960	2.99	-3.15	1,852	2,013	2,173
65	0.2533	3.53	-3.06	1,576	1,723	1,870
70	0.2177	4.09	-2.98	1,346	1,481	1,615
75	0.1879	4.67	-2.90	1,154	1,278	1,401
80	0.1628	5.26	-2.83	993.3	1,107	1,220
85	0.1415	5.87	-2.76	857.8	962.4	1,067
90	0.1235	6.48	-2.69	743.3	839.7	936.1
95	0.1081	7.11	-2.62	646.2	735.3	824.3
100	0.0950	7.74	-2.55	563.6	645.9	728.2
105	0.0837	8.38	-2.49	493.1	569.3	645.5
110	0.0740	9.03	-2.43	432.7	503.3	573.9
115	0.0656	9.68	-2.37	380.8	446.3	511.8
120	0.0584	10.33	-2.31	336.1	396.9	457.8
125	0.0521	10.99	-2.26	297.4	354.0	410.6
130	0.0466	11.65	-2.21	263.9	316.6	369.3
135	0.0417	12.31	-2.15	234.7	283.9	333.0
140	0.0375	12.97	-2.10	209.3	255.2	301.0
145	0.0338	13.63	-2.06	187.1	230.0	272.8
150	0.0305	14.29	-2.01	167.7	207.7	247.8