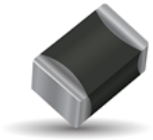
NB21J50682HBD

(0603, 6800 Ohm ±3%, 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)	±3%
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

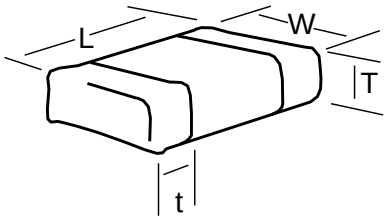
MSL 1
Pb Free
260°C

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	H	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	269,298	351,908	434,519
-50	37.98	17.69	-6.03	204,821	258,252	311,683
-45	28.15	15.21	-5.84	156,573	191,431	226,290
-40	21.07	13.00	-5.65	120,342	143,270	166,199
-35	15.91	11.04	-5.48	93,020	108,219	123,418
-30	12.13	9.31	-5.31	72,319	82,469	92,619
-25	9.321	7.77	-5.15	56,556	63,382	70,209
-20	7.222	6.41	-4.99	44,488	49,112	53,735
-15	5.640	5.22	-4.84	35,200	38,353	41,507
-10	4.438	4.18	-4.69	28,012	30,178	32,344
-5	3.517	3.27	-4.55	22,419	23,918	25,417
0	2.807	2.48	-4.42	18,043	19,089	20,134
5	2.255	1.80	-4.29	14,601	15,337	16,073
10	1.824	1.22	-4.17	11,879	12,402	12,926
15	1.484	0.73	-4.05	9,714	10,091	10,468
20	1.215	0.33	-3.93	7,985	8,260	8,535
25	1.000	0.00	-3.82	6,596	6,800	7,004
30	0.8278	0.32	-3.71	5,442	5,629	5,816
35	0.6889	0.68	-3.61	4,512	4,685	4,857
40	0.5763	1.08	-3.51	3,759	3,919	4,079
45	0.4845	1.51	-3.41	3,146	3,294	3,443
50	0.4092	1.98	-3.32	2,644	2,783	2,921
55	0.3472	2.47	-3.23	2,232	2,361	2,491
60	0.2960	2.99	-3.15	1,892	2,013	2,133
65	0.2533	3.53	-3.06	1,610	1,723	1,835
70	0.2177	4.09	-2.98	1,376	1,481	1,586
75	0.1879	4.67	-2.90	1,180	1,278	1,376
80	0.1628	5.26	-2.83	1,015	1,107	1,198
85	0.1415	5.87	-2.76	877.0	962.4	1,048
90	0.1235	6.48	-2.69	760.1	839.7	919.4
95	0.1081	7.11	-2.62	660.9	735.3	809.6
100	0.0950	7.74	-2.55	576.6	645.9	715.3
105	0.0837	8.38	-2.49	504.5	569.3	634.1
110	0.0740	9.03	-2.43	442.8	503.3	563.9
115	0.0656	9.68	-2.37	389.7	446.3	502.9
120	0.0584	10.33	-2.31	344.0	396.9	449.9
125	0.0521	10.99	-2.26	304.5	354.0	403.5
130	0.0466	11.65	-2.21	270.2	316.6	363.0
135	0.0417	12.31	-2.15	240.4	283.9	327.3
140	0.0375	12.97	-2.10	214.4	255.2	295.9
145	0.0338	13.63	-2.06	191.7	230.0	268.2
150	0.0305	14.29	-2.01	171.8	207.7	243.6