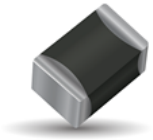
NB21J00502JBB

(0603, 5000 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	5000 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

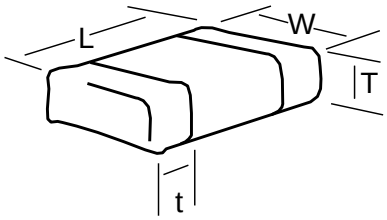
MSL 1
Pb Free
260°C

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	J0	0502	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

J0 (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	192,838	258,756	324,674
-50	37.98	17.69	-6.03	146,806	189,891	232,977
-45	28.15	15.21	-5.84	112,312	140,758	169,205
-40	21.07	13.00	-5.65	86,380	105,346	124,312
-35	15.91	11.04	-5.48	66,806	79,573	92,340
-30	12.13	9.31	-5.31	51,963	60,639	69,315
-25	9.321	7.77	-5.15	40,653	46,604	52,556
-20	7.222	6.41	-4.99	31,990	36,111	40,233
-15	5.640	5.22	-4.84	25,318	28,201	31,084
-10	4.438	4.18	-4.69	20,153	22,190	24,226
-5	3.517	3.27	-4.55	16,133	17,587	19,041
0	2.807	2.48	-4.42	12,986	14,036	15,085
5	2.255	1.80	-4.29	10,510	11,277	12,044
10	1.824	1.22	-4.17	8,552	9,119	9,686
15	1.484	0.73	-4.05	6,995	7,420	7,845
20	1.215	0.33	-3.93	5,750	6,074	6,397
25	1.000	0.00	-3.82	4,750	5,000	5,250
30	0.8278	0.32	-3.71	3,919	4,139	4,359
35	0.6889	0.68	-3.61	3,249	3,445	3,640
40	0.5763	1.08	-3.51	2,706	2,881	3,057
45	0.4845	1.51	-3.41	2,265	2,422	2,580
50	0.4092	1.98	-3.32	1,903	2,046	2,189
55	0.3472	2.47	-3.23	1,606	1,736	1,866
60	0.2960	2.99	-3.15	1,362	1,480	1,598
65	0.2533	3.53	-3.06	1,159	1,267	1,375
70	0.2177	4.09	-2.98	989.7	1,089	1,188
75	0.1879	4.67	-2.90	848.7	939.5	1,030
80	0.1628	5.26	-2.83	730.3	813.9	897.4
85	0.1415	5.87	-2.76	630.7	707.6	784.5
90	0.1235	6.48	-2.69	546.6	617.4	688.3
95	0.1081	7.11	-2.62	475.2	540.6	606.1
100	0.0950	7.74	-2.55	414.4	475.0	535.5
105	0.0837	8.38	-2.49	362.6	418.6	474.6
110	0.0740	9.03	-2.43	318.2	370.1	422.0
115	0.0656	9.68	-2.37	280.0	328.2	376.4
120	0.0584	10.33	-2.31	247.1	291.9	336.6
125	0.0521	10.99	-2.26	218.7	260.3	301.9
130	0.0466	11.65	-2.21	194.0	232.8	271.6
135	0.0417	12.31	-2.15	172.6	208.7	244.9
140	0.0375	12.97	-2.10	153.9	187.6	221.4
145	0.0338	13.63	-2.06	137.6	169.1	200.6
150	0.0305	14.29	-2.01	123.3	152.7	182.2