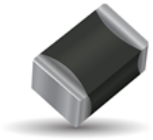
NB20N00563MBE

(1206, 56 kOhm ±20%, 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	1206
Operating temperature	-55°C to +150°C
Resistance	56 kOhm
Tolerance on Resistance (25°C)	±20%
B 25/85	4080K±3%
Maximum dissipation at 25°C	0.24 W
Thermal dissipation factor	4 mW/°C
Thermal time constant	7 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

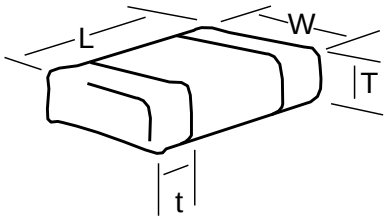
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions WWWW

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
1206	3.2±0.4	1.6±0.25	1.5 max	0.2 min
	(0.126±0.016)	(0.063±0.01)	(0.059) max	(0.008) min



How to Order (Packaging options)

NB	20	N0	0563	M	BE
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	20 = 1206	See Datasheet	2 Sig. Digits + Number of Zeros	H = ±3%* J = ±5% K = ±10% M = ±20% * For selected PNs	BA = Plastic tape (180mm reel, 3,000 pcs/reel) BE = Plastic tape (180mm reel, 1,500 pcs/reel) BC = Plastic tape (330mm reel, 10,000 pcs/reel) -- = Bulk (5000 pcs/bag)

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	3,452,248	6,165,451	8,878,654
-50	75.89	20.74	-7.25	2,518,405	4,249,804	5,981,204
-45	52.97	17.83	-7.01	1,844,161	2,966,457	4,088,754
-40	37.42	15.25	-6.78	1,357,066	2,095,746	2,834,425
-35	26.75	12.95	-6.56	1,004,271	1,497,782	1,991,294
-30	19.33	10.91	-6.35	747,750	1,082,326	1,416,902
-25	14.11	9.11	-6.14	560,334	790,436	1,020,537
-20	10.41	7.52	-5.95	422,666	583,155	743,644
-15	7.758	6.12	-5.76	320,953	434,439	547,926
-10	5.834	4.90	-5.58	245,348	326,685	408,023
-5	4.426	3.83	-5.41	188,801	247,868	306,936
0	3.387	2.91	-5.24	146,242	189,691	233,140
5	2.614	2.11	-5.08	114,010	146,372	178,734
10	2.033	1.43	-4.93	89,446	113,844	138,242
15	1.593	0.86	-4.78	70,610	89,221	107,833
20	1.258	0.39	-4.64	56,078	70,437	84,796
25	1.000	0.00	-4.51	44,800	56,000	67,200
30	0.8004	0.37	-4.37	35,692	44,824	53,955
35	0.6449	0.80	-4.25	28,602	36,112	43,621
40	0.5228	1.26	-4.13	23,050	29,275	35,500
45	0.4264	1.77	-4.01	18,677	23,876	29,075
50	0.3497	2.32	-3.90	15,214	19,585	23,957
55	0.2885	2.90	-3.79	12,456	16,155	19,855
60	0.2392	3.51	-3.68	10,248	13,397	16,547
65	0.1994	4.14	-3.58	8,471.7	11,168	13,864
70	0.1671	4.80	-3.49	7,035.5	9,355.7	11,676
75	0.1406	5.48	-3.39	5,868.9	7,875.1	9,881.3
80	0.1189	6.17	-3.30	4,916.7	6,659.4	8,402.1
85	0.1010	6.88	-3.22	4,136.2	5,656.5	7,176.8
90	0.0862	7.60	-3.13	3,493.5	4,825.2	6,157.0
95	0.0738	8.33	-3.05	2,962.1	4,133.1	5,304.2
100	0.0635	9.08	-2.97	2,521.0	3,554.5	4,588.0
105	0.0548	9.83	-2.90	2,153.3	3,068.6	3,983.8
110	0.0475	10.58	-2.83	1,845.7	2,658.9	3,472.2
115	0.0413	11.35	-2.76	1,587.4	2,312.3	3,037.1
120	0.0360	12.11	-2.69	1,369.7	2,017.7	2,665.7
125	0.0315	12.89	-2.62	1,185.7	1,766.6	2,347.6
130	0.0277	13.66	-2.56	1,029.5	1,551.8	2,074.1
135	0.0244	14.43	-2.50	896.5	1,367.3	1,838.1
140	0.0216	15.21	-2.44	782.9	1,208.4	1,633.8
145	0.0191	15.98	-2.38	685.7	1,071.0	1,456.4
150	0.0170	16.76	-2.33	602.1	952.0	1,301.9