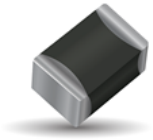
NB20N00823JBE

(1206, 82 kOhm ±5%, 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	82 kOhm
Tolerance on Resistance (25°C)	±5%
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

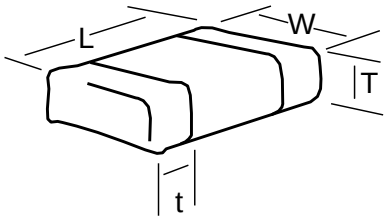
MSL 1
Pb Free
260°C

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	0823	J	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	6,409,275	9,027,982	11,646,688
-50	75.89	20.74	-7.25	4,621,104	6,222,928	7,824,752
-45	52.97	17.83	-7.01	3,351,939	4,343,741	5,335,543
-40	37.42	15.25	-6.78	2,447,448	3,068,771	3,690,093
-35	26.75	12.95	-6.56	1,799,517	2,193,181	2,586,846
-30	19.33	10.91	-6.35	1,332,645	1,584,834	1,837,024
-25	14.11	9.11	-6.14	994,103	1,157,424	1,320,745
-20	10.41	7.52	-5.95	746,989	853,905	960,821
-15	7.758	6.12	-5.76	565,388	636,143	706,899
-10	5.834	4.90	-5.58	431,013	478,361	525,708
-5	4.426	3.83	-5.41	330,901	362,950	394,999
0	3.387	2.91	-5.24	255,804	277,762	299,719
5	2.614	2.11	-5.08	199,092	214,330	229,568
10	2.033	1.43	-4.93	155,979	166,700	177,421
15	1.593	0.86	-4.78	122,989	130,645	138,301
20	1.258	0.39	-4.64	97,585	103,140	108,695
25	1.000	0.00	-4.51	77,900	82,000	86,100
30	0.8004	0.37	-4.37	62,109	65,635	69,161
35	0.6449	0.80	-4.25	49,813	52,878	55,942
40	0.5228	1.26	-4.13	40,182	42,867	45,553
45	0.4264	1.77	-4.01	32,593	34,961	37,330
50	0.3497	2.32	-3.90	26,579	28,678	30,778
55	0.2885	2.90	-3.79	21,787	23,656	25,525
60	0.2392	3.51	-3.68	17,948	19,618	21,287
65	0.1994	4.14	-3.58	14,858	16,353	17,848
70	0.1671	4.80	-3.49	12,357	13,699	15,042
75	0.1406	5.48	-3.39	10,323	11,531	12,739
80	0.1189	6.17	-3.30	8,662.2	9,751.3	10,840
85	0.1010	6.88	-3.22	7,298.9	8,282.7	9,266.5
90	0.0862	7.60	-3.13	6,175.3	7,065.5	7,955.7
95	0.0738	8.33	-3.05	5,245.2	6,052.1	6,859.0
100	0.0635	9.08	-2.97	4,472.1	5,204.7	5,937.4
105	0.0548	9.83	-2.90	3,827.1	4,493.3	5,159.5
110	0.0475	10.58	-2.83	3,286.7	3,893.4	4,500.2
115	0.0413	11.35	-2.76	2,832.3	3,385.8	3,939.3
120	0.0360	12.11	-2.69	2,448.9	2,954.5	3,460.2
125	0.0315	12.89	-2.62	2,124.2	2,586.8	3,049.5
130	0.0277	13.66	-2.56	1,848.3	2,272.2	2,696.2
135	0.0244	14.43	-2.50	1,613.0	2,002.1	2,391.1
140	0.0216	15.21	-2.44	1,411.9	1,769.4	2,127.0
145	0.0191	15.98	-2.38	1,239.3	1,568.3	1,897.4
150	0.0170	16.76	-2.33	1,090.7	1,394.0	1,697.3