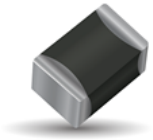
NB20J50822HBC

(1206, 8200 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	1206
Operating temperature	-55°C to +150°C
Resistance	8200 Ohm
Tolerance on Resistance (25°C)	±3%
B 25/85	3480K±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

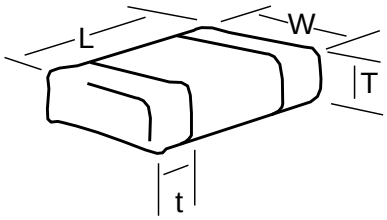
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions

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	J5	0822	H	BC
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

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	324,741	424,360	523,978
-50	37.98	17.69	-6.03	246,990	311,422	375,853
-45	28.15	15.21	-5.84	188,808	230,844	272,879
-40	21.07	13.00	-5.65	145,118	172,767	200,416
-35	15.91	11.04	-5.48	112,171	130,499	148,827
-30	12.13	9.31	-5.31	87,209	99,448	111,687
-25	9.321	7.77	-5.15	68,199	76,431	84,663
-20	7.222	6.41	-4.99	53,647	59,223	64,798
-15	5.640	5.22	-4.84	42,447	46,250	50,052
-10	4.438	4.18	-4.69	33,779	36,391	39,003
-5	3.517	3.27	-4.55	27,035	28,842	30,650
0	2.807	2.48	-4.42	21,758	23,019	24,280
5	2.255	1.80	-4.29	17,607	18,495	19,382
10	1.824	1.22	-4.17	14,324	14,955	15,587
15	1.484	0.73	-4.05	11,714	12,169	12,623
20	1.215	0.33	-3.93	9,629.0	9,960.6	10,292
25	1.000	0.00	-3.82	7,954.0	8,200.0	8,446.0
30	0.8278	0.32	-3.71	6,562.9	6,788.1	7,013.2
35	0.6889	0.68	-3.61	5,441.4	5,649.2	5,857.0
40	0.5763	1.08	-3.51	4,532.9	4,725.7	4,918.4
45	0.4845	1.51	-3.41	3,793.3	3,972.7	4,152.0
50	0.4092	1.98	-3.32	3,188.5	3,355.6	3,522.7
55	0.3472	2.47	-3.23	2,691.6	2,847.4	3,003.3
60	0.2960	2.99	-3.15	2,281.5	2,426.9	2,572.4
65	0.2533	3.53	-3.06	1,941.7	2,077.4	2,213.1
70	0.2177	4.09	-2.98	1,658.9	1,785.5	1,912.2
75	0.1879	4.67	-2.90	1,422.6	1,540.8	1,659.0
80	0.1628	5.26	-2.83	1,224.5	1,334.7	1,445.0
85	0.1415	5.87	-2.76	1,057.6	1,160.5	1,263.4
90	0.1235	6.48	-2.69	916.6	1,012.6	1,108.6
95	0.1081	7.11	-2.62	797.0	886.6	976.3
100	0.0950	7.74	-2.55	695.3	778.9	862.6
105	0.0837	8.38	-2.49	608.4	686.5	764.7
110	0.0740	9.03	-2.43	534.0	607.0	680.0
115	0.0656	9.68	-2.37	470.0	538.2	606.5
120	0.0584	10.33	-2.31	414.9	478.7	542.5
125	0.0521	10.99	-2.26	367.2	426.9	486.6
130	0.0466	11.65	-2.21	325.9	381.8	437.7
135	0.0417	12.31	-2.15	289.9	342.3	394.7
140	0.0375	12.97	-2.10	258.6	307.7	356.9
145	0.0338	13.63	-2.06	231.2	277.3	323.4
150	0.0305	14.29	-2.01	207.2	250.5	293.8