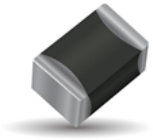
NB20R00105MBA

(1206, 1 MOhm ±20%, 4400K, 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	1 MOhm
Tolerance on Resistance (25°C)	±20%
B 25/85	4400K±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

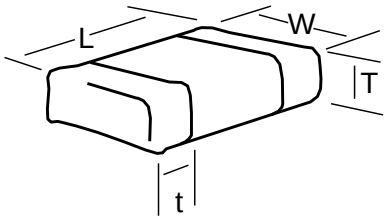
MSL 1
Pb Free
260°C

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	R0	0105	M	BA
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

R0 (B25/85 = 4400K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4326 K	4382 K	4400 K	4423 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	113.9	25.89	-7.13	61,622,106	113,877,884	166,133,661
-50	79.71	22.37	-6.95	45,937,911	79,705,981	113,474,050
-45	56.30	19.23	-6.77	34,216,288	56,304,724	78,393,159
-40	40.13	16.44	-6.60	25,506,770	40,131,006	54,755,243
-35	28.85	13.96	-6.44	19,052,987	28,852,467	38,651,947
-30	20.92	11.77	-6.28	14,273,690	20,919,268	27,564,845
-25	15.29	9.82	-6.12	10,731,346	15,292,174	19,853,002
-20	11.27	8.11	-5.97	8,100,704	11,268,206	14,435,709
-15	8.368	6.60	-5.82	6,141,770	8,367,795	10,593,821
-10	6.261	5.28	-5.68	4,678,185	6,261,086	7,843,986
-5	4.719	4.13	-5.53	3,580,582	4,719,386	5,858,189
0	3.583	3.13	-5.40	2,754,086	3,582,914	4,411,742
5	2.739	2.27	-5.26	2,129,044	2,739,192	3,349,341
10	2.108	1.54	-5.13	1,654,230	2,108,466	2,562,702
15	1.634	0.93	-5.00	1,291,872	1,633,778	1,975,684
20	1.274	0.42	-4.88	1,014,038	1,274,172	1,534,307
25	1.000	0.00	-4.75	800,000	1,000,000	1,200,000
30	0.7897	0.40	-4.64	628,558	789,656	950,754
35	0.6273	0.86	-4.52	496,458	627,296	758,134
40	0.5012	1.36	-4.41	394,150	501,229	608,309
45	0.4028	1.91	-4.30	314,513	402,776	491,039
50	0.3255	2.50	-4.19	252,215	325,452	398,689
55	0.2644	3.13	-4.09	203,241	264,389	325,537
60	0.2159	3.78	-3.98	164,558	215,909	267,261
65	0.1772	4.47	-3.89	133,857	177,218	220,578
70	0.1462	5.18	-3.79	109,380	146,181	182,983
75	0.1212	5.90	-3.70	89,775	121,162	152,548
80	0.1009	6.65	-3.60	74,004	100,895	127,786
85	0.0844	7.42	-3.52	61,261	84,401	107,541
90	0.0709	8.20	-3.43	50,921	70,916	90,911
95	0.0598	8.99	-3.35	42,496	59,842	77,188
100	0.0507	9.79	-3.26	35,604	50,708	65,812
105	0.0431	10.60	-3.19	29,943	43,143	56,343
110	0.0369	11.41	-3.11	25,275	36,851	48,427
115	0.0316	12.24	-3.03	21,411	31,597	41,783
120	0.0272	13.06	-2.96	18,202	27,193	36,184
125	0.0235	13.89	-2.89	15,526	23,487	31,448
130	0.0204	14.73	-2.82	13,288	20,357	27,427
135	0.0177	15.56	-2.76	11,408	17,705	24,001
140	0.0154	16.40	-2.69	9,825.5	15,449	21,072
145	0.0135	17.23	-2.63	8,487.8	13,523	18,558
150	0.0119	18.07	-2.57	7,353.9	11,874	16,395