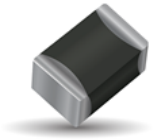
NB20K00103KBA

(1206, 10 kOhm ±10%, 3630K, 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	10 kOhm
Tolerance on Resistance (25°C)	±10%
B 25/85	3630K±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

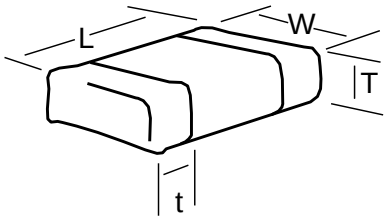
MSL 1
Pb Free
260°C

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	K0	0103	K	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

K0 (B25/85 = 3630K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3581 K	3618 K	3630 K	3646 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	56.27	21.36	-6.25	386,251	562,688	739,126
-50	41.22	18.45	-6.06	294,924	412,197	529,471
-45	30.48	15.86	-5.89	225,949	304,777	383,605
-40	22.74	13.56	-5.71	173,800	227,378	280,956
-35	17.11	11.52	-5.55	134,283	171,105	207,926
-30	12.98	9.71	-5.39	104,246	129,834	155,421
-25	9.931	8.10	-5.24	81,330	99,310	117,290
-20	7.655	6.69	-5.09	63,776	76,553	89,330
-15	5.945	5.45	-4.95	50,269	59,453	68,636
-10	4.651	4.36	-4.81	39,829	46,506	53,183
-5	3.663	3.41	-4.67	31,721	36,633	41,544
0	2.905	2.58	-4.54	25,395	29,050	32,706
5	2.319	1.88	-4.42	20,434	23,187	25,941
10	1.862	1.27	-4.30	16,525	18,624	20,724
15	1.505	0.77	-4.18	13,430	15,050	16,670
20	1.223	0.34	-4.07	10,968	12,233	13,498
25	1.000	0.00	-3.96	9,000.0	10,000	11,000
30	0.8219	0.33	-3.85	7,370.3	8,219.4	9,068.5
35	0.6792	0.71	-3.75	6,064.5	6,791.7	7,518.9
40	0.5641	1.12	-3.65	5,013.2	5,640.8	6,268.3
45	0.4708	1.58	-3.55	4,163.0	4,708.1	5,253.2
50	0.3949	2.07	-3.46	3,472.1	3,948.5	4,424.9
55	0.3327	2.58	-3.37	2,908.3	3,326.8	3,745.4
60	0.2816	3.12	-3.28	2,446.1	2,815.6	3,185.0
65	0.2393	3.69	-3.20	2,065.7	2,393.3	2,720.8
70	0.2043	4.27	-3.12	1,751.3	2,042.8	2,334.3
75	0.1751	4.87	-3.04	1,490.4	1,750.8	2,011.1
80	0.1506	5.49	-2.96	1,273.1	1,506.4	1,739.7
85	0.1301	6.12	-2.89	1,091.3	1,301.0	1,510.7
90	0.1128	6.76	-2.82	938.8	1,127.8	1,316.8
95	0.0981	7.41	-2.75	810.3	981.1	1,151.9
100	0.0856	8.07	-2.68	701.6	856.4	1,011.2
105	0.0750	8.74	-2.61	609.5	750.1	890.7
110	0.0659	9.42	-2.55	531.1	659.1	787.1
115	0.0581	10.09	-2.49	464.2	580.9	697.7
120	0.0514	10.78	-2.43	406.9	513.6	620.3
125	0.0455	11.46	-2.37	357.7	455.4	553.1
130	0.0405	12.15	-2.32	315.2	404.9	494.6
135	0.0361	12.84	-2.26	278.6	361.1	443.5
140	0.0323	13.53	-2.21	246.8	322.8	398.7
145	0.0289	14.22	-2.16	219.3	289.3	359.4
150	0.0260	14.91	-2.11	195.2	260.0	324.7