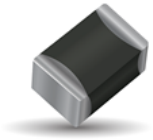
NB20K00123HBC

(1206, 12 kOhm ±3%, 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	12 kOhm
Tolerance on Resistance (25°C)	±3%
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

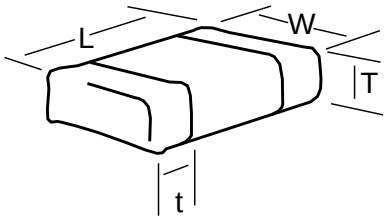
MSL 1
Pb Free
260°C

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	0123	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)

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	510,767	675,226	839,685
-50	41.22	18.45	-6.06	388,533	494,637	600,740
-45	30.48	15.86	-5.89	296,740	365,732	434,724
-40	22.74	13.56	-5.71	227,660	272,854	318,047
-35	17.11	11.52	-5.55	175,513	205,326	235,139
-30	12.98	9.71	-5.39	136,001	155,800	175,599
-25	9.931	8.10	-5.24	105,938	119,172	132,406
-20	7.655	6.69	-5.09	82,961	91,863	100,765
-15	5.945	5.45	-4.95	65,317	71,343	77,369
-10	4.651	4.36	-4.81	51,702	55,807	59,913
-5	3.663	3.41	-4.67	41,143	43,960	46,776
0	2.905	2.58	-4.54	32,914	34,861	36,807
5	2.319	1.88	-4.42	26,468	27,825	29,182
10	1.862	1.27	-4.30	21,394	22,349	23,304
15	1.505	0.77	-4.18	17,380	18,060	18,740
20	1.223	0.34	-4.07	14,189	14,680	15,171
25	1.000	0.00	-3.96	11,640	12,000	12,360
30	0.8219	0.33	-3.85	9,534.7	9,863.3	10,192
35	0.6792	0.71	-3.75	7,847.9	8,150.0	8,452.2
40	0.5641	1.12	-3.65	6,489.7	6,768.9	7,048.1
45	0.4708	1.58	-3.55	5,391.0	5,649.7	5,908.4
50	0.3949	2.07	-3.46	4,498.2	4,738.2	4,978.2
55	0.3327	2.58	-3.37	3,769.4	3,992.2	4,215.0
60	0.2816	3.12	-3.28	3,171.9	3,378.7	3,585.5
65	0.2393	3.69	-3.20	2,679.9	2,871.9	3,063.9
70	0.2043	4.27	-3.12	2,273.2	2,451.4	2,629.6
75	0.1751	4.87	-3.04	1,935.6	2,100.9	2,266.3
80	0.1506	5.49	-2.96	1,654.2	1,807.6	1,961.1
85	0.1301	6.12	-2.89	1,418.9	1,561.2	1,703.6
90	0.1128	6.76	-2.82	1,221.2	1,353.3	1,485.4
95	0.0981	7.41	-2.75	1,054.7	1,177.3	1,299.9
100	0.0856	8.07	-2.68	913.9	1,027.7	1,141.5
105	0.0750	8.74	-2.61	794.4	900.1	1,005.8
110	0.0659	9.42	-2.55	692.7	790.9	889.1
115	0.0581	10.09	-2.49	605.8	697.1	788.4
120	0.0514	10.78	-2.43	531.4	616.3	701.2
125	0.0455	11.46	-2.37	467.4	546.5	625.5
130	0.0405	12.15	-2.32	412.3	485.9	559.5
135	0.0361	12.84	-2.26	364.6	433.3	501.9
140	0.0323	13.53	-2.21	323.3	387.4	451.4
145	0.0289	14.22	-2.16	287.4	347.2	407.0
150	0.0260	14.91	-2.11	256.1	312.0	367.8