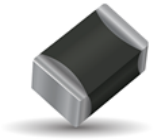
NB20K00123JBA

(1206, 12 kOhm ±5%, 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)	±5%
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

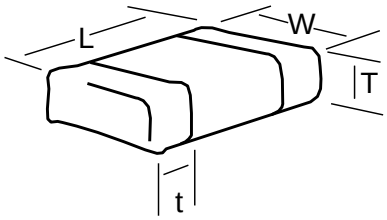
MSL 1
Pb Free
260°C

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	J	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	497,263	675,226	853,190
-50	41.22	18.45	-6.06	378,640	494,637	610,633
-45	30.48	15.86	-5.89	289,426	365,732	442,039
-40	22.74	13.56	-5.71	222,203	272,854	323,504
-35	17.11	11.52	-5.55	171,406	205,326	239,245
-30	12.98	9.71	-5.39	132,885	155,800	178,715
-25	9.931	8.10	-5.24	103,555	119,172	134,790
-20	7.655	6.69	-5.09	81,124	91,863	102,603
-15	5.945	5.45	-4.95	63,890	71,343	78,796
-10	4.651	4.36	-4.81	50,585	55,807	61,029
-5	3.663	3.41	-4.67	40,264	43,960	47,655
0	2.905	2.58	-4.54	32,217	34,861	37,505
5	2.319	1.88	-4.42	25,912	27,825	29,738
10	1.862	1.27	-4.30	20,947	22,349	23,751
15	1.505	0.77	-4.18	17,019	18,060	19,101
20	1.223	0.34	-4.07	13,895	14,680	15,464
25	1.000	0.00	-3.96	11,400	12,000	12,600
30	0.8219	0.33	-3.85	9,337.5	9,863.3	10,389
35	0.6792	0.71	-3.75	7,684.9	8,150.0	8,615.2
40	0.5641	1.12	-3.65	6,354.3	6,768.9	7,183.5
45	0.4708	1.58	-3.55	5,278.0	5,649.7	6,021.4
50	0.3949	2.07	-3.46	4,403.4	4,738.2	5,073.0
55	0.3327	2.58	-3.37	3,689.6	3,992.2	4,294.8
60	0.2816	3.12	-3.28	3,104.3	3,378.7	3,653.1
65	0.2393	3.69	-3.20	2,622.5	2,871.9	3,121.4
70	0.2043	4.27	-3.12	2,224.2	2,451.4	2,678.6
75	0.1751	4.87	-3.04	1,893.6	2,100.9	2,308.3
80	0.1506	5.49	-2.96	1,618.1	1,807.6	1,997.2
85	0.1301	6.12	-2.89	1,387.6	1,561.2	1,734.8
90	0.1128	6.76	-2.82	1,194.2	1,353.3	1,512.5
95	0.0981	7.41	-2.75	1,031.2	1,177.3	1,323.5
100	0.0856	8.07	-2.68	893.4	1,027.7	1,162.1
105	0.0750	8.74	-2.61	776.4	900.1	1,023.8
110	0.0659	9.42	-2.55	676.9	790.9	904.9
115	0.0581	10.09	-2.49	591.9	697.1	802.4
120	0.0514	10.78	-2.43	519.1	616.3	713.6
125	0.0455	11.46	-2.37	456.5	546.5	636.4
130	0.0405	12.15	-2.32	402.6	485.9	569.3
135	0.0361	12.84	-2.26	356.0	433.3	510.6
140	0.0323	13.53	-2.21	315.6	387.4	459.1
145	0.0289	14.22	-2.16	280.5	347.2	413.9
150	0.0260	14.91	-2.11	249.9	312.0	374.1