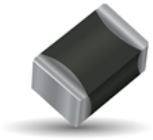
NB20L00223HBA

(1206, 22 kOhm ±3%, 3790K, 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	22 kOhm
Tolerance on Resistance (25°C)	±3%
B 25/85	3790K±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

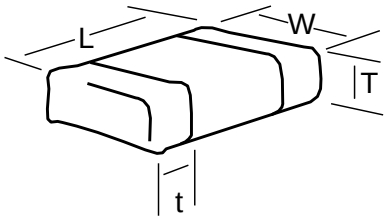
MSL 1
Pb Free 260°C

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	L0	0223	H	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%	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)

* For selected PNs

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

L0 (B25/85 = 3790K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3765 K	3784 K	3790 K	3798 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	82.54	22.30	-7.12	1,356,516	1,815,946	2,275,376
-50	58.03	19.27	-6.87	992,351	1,276,600	1,560,848
-45	41.31	16.57	-6.63	730,927	908,718	1,086,509
-40	29.75	14.16	-6.40	542,252	654,599	766,945
-35	21.68	12.03	-6.18	405,255	476,932	548,609
-30	15.97	10.14	-5.98	305,129	351,276	397,422
-25	11.88	8.46	-5.78	231,454	261,421	291,387
-20	8.931	6.99	-5.59	176,864	196,485	216,107
-15	6.777	5.69	-5.40	136,132	149,084	162,035
-10	5.188	4.55	-5.23	105,528	114,146	122,763
-5	4.007	3.56	-5.06	82,374	88,155	93,937
0	3.120	2.70	-4.90	64,737	68,649	72,561
5	2.449	1.96	-4.75	51,212	53,885	56,557
10	1.937	1.33	-4.60	40,773	42,618	44,463
15	1.543	0.80	-4.46	32,664	33,953	35,243
20	1.238	0.36	-4.33	26,325	27,240	28,154
25	1.000	0.00	-4.20	21,340	22,000	22,660
30	0.8128	0.35	-4.07	17,284	17,883	18,481
35	0.6648	0.74	-3.95	14,079	14,625	15,172
40	0.5469	1.17	-3.84	11,530	12,032	12,535
45	0.4525	1.65	-3.73	9,492.6	9,955.3	10,418
50	0.3764	2.16	-3.62	7,854.8	8,281.8	8,708.9
55	0.3148	2.69	-3.52	6,531.4	6,925.8	7,320.2
60	0.2646	3.26	-3.42	5,456.6	5,821.0	6,185.3
65	0.2235	3.85	-3.33	4,579.4	4,916.1	5,252.8
70	0.1896	4.46	-3.24	3,860.2	4,171.2	4,482.3
75	0.1616	5.09	-3.15	3,267.6	3,555.1	3,842.6
80	0.1383	5.73	-3.07	2,777.4	3,043.1	3,308.7
85	0.1189	6.39	-2.98	2,370.0	2,615.6	2,861.2
90	0.1026	7.06	-2.91	2,030.1	2,257.2	2,484.2
95	0.0889	7.74	-2.83	1,745.3	1,955.3	2,165.4
100	0.0773	8.43	-2.76	1,505.8	1,700.2	1,894.5
105	0.0674	9.13	-2.69	1,303.7	1,483.6	1,663.5
110	0.0590	9.83	-2.62	1,132.4	1,299.1	1,465.8
115	0.0519	10.54	-2.56	986.8	1,141.3	1,295.8
120	0.0457	11.25	-2.49	862.5	1,005.9	1,149.3
125	0.0404	11.97	-2.43	756.2	889.3	1,022.4
130	0.0358	12.69	-2.37	664.9	788.6	912.3
135	0.0319	13.41	-2.32	586.2	701.3	816.4
140	0.0284	14.13	-2.26	518.3	625.4	732.5
145	0.0254	14.85	-2.21	459.4	559.2	659.1
150	0.0228	15.57	-2.16	408.3	501.4	594.5