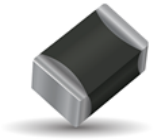
NB20L00183MBC

(1206, 18 kOhm ±20%, 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	18 kOhm
Tolerance on Resistance (25°C)	±20%
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

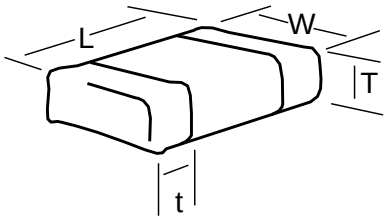
MSL 1
Pb Free
260°C

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	0183	M	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)

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	857,295	1,485,774	2,114,253
-50	58.03	19.27	-6.87	634,360	1,044,491	1,454,621
-45	41.31	16.57	-6.63	471,637	743,496	1,015,356
-40	29.75	14.16	-6.40	352,612	535,581	718,549
-35	21.68	12.03	-6.18	265,235	390,217	515,198
-30	15.97	10.14	-5.98	200,792	287,407	374,023
-25	11.88	8.46	-5.78	153,010	213,890	274,769
-20	8.931	6.99	-5.59	117,378	160,761	204,144
-15	6.777	5.69	-5.40	90,645	121,978	153,310
-10	5.188	4.55	-5.23	70,465	93,392	116,319
-5	4.007	3.56	-5.06	55,135	72,127	89,119
0	3.120	2.70	-4.90	43,418	56,167	68,917
5	2.449	1.96	-4.75	34,406	44,087	53,769
10	1.937	1.33	-4.60	27,432	34,869	42,307
15	1.543	0.80	-4.46	22,002	27,780	33,558
20	1.238	0.36	-4.33	17,750	22,287	26,824
25	1.000	0.00	-4.20	14,400	18,000	21,600
30	0.8128	0.35	-4.07	11,654	14,631	17,608
35	0.6648	0.74	-3.95	9,484.6	11,966	14,448
40	0.5469	1.17	-3.84	7,760.1	9,844.7	11,929
45	0.4525	1.65	-3.73	6,382.0	8,145.3	9,908.6
50	0.3764	2.16	-3.62	5,274.7	6,776.0	8,277.4
55	0.3148	2.69	-3.52	4,380.6	5,666.6	6,952.5
60	0.2646	3.26	-3.42	3,654.9	4,762.6	5,870.4
65	0.2235	3.85	-3.33	3,063.0	4,022.3	4,981.5
70	0.1896	4.46	-3.24	2,578.1	3,412.8	4,247.5
75	0.1616	5.09	-3.15	2,179.0	2,908.7	3,638.4
80	0.1383	5.73	-3.07	1,849.2	2,489.8	3,130.4
85	0.1189	6.39	-2.98	1,575.3	2,140.0	2,704.8
90	0.1026	7.06	-2.91	1,347.0	1,846.8	2,346.5
95	0.0889	7.74	-2.83	1,156.0	1,599.8	2,043.6
100	0.0773	8.43	-2.76	995.6	1,391.1	1,786.5
105	0.0674	9.13	-2.69	860.3	1,213.9	1,567.4
110	0.0590	9.83	-2.62	745.8	1,062.9	1,380.0
115	0.0519	10.54	-2.56	648.6	933.8	1,219.0
120	0.0457	11.25	-2.49	565.8	823.0	1,080.2
125	0.0404	11.97	-2.43	495.0	727.6	960.2
130	0.0358	12.69	-2.37	434.3	645.2	856.1
135	0.0319	13.41	-2.32	382.1	573.8	765.5
140	0.0284	14.13	-2.26	337.1	511.7	686.3
145	0.0254	14.85	-2.21	298.1	457.6	617.0
150	0.0228	15.57	-2.16	264.3	410.2	556.1