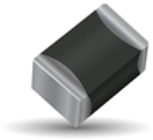
NB20L00183H--

(1206, 18 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	18 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

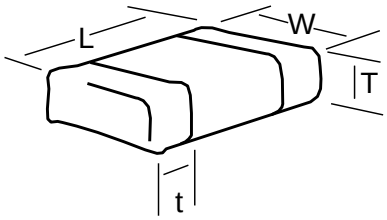
MSL 1
Pb Free 260°C

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	0183	H	--
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	1,109,877	1,485,774	1,861,671
-50	58.03	19.27	-6.87	811,924	1,044,491	1,277,058
-45	41.31	16.57	-6.63	598,031	743,496	888,962
-40	29.75	14.16	-6.40	443,661	535,581	627,500
-35	21.68	12.03	-6.18	331,572	390,217	448,862
-30	15.97	10.14	-5.98	249,651	287,407	325,164
-25	11.88	8.46	-5.78	189,371	213,890	238,408
-20	8.931	6.99	-5.59	144,707	160,761	176,815
-15	6.777	5.69	-5.40	111,381	121,978	132,574
-10	5.188	4.55	-5.23	86,341	93,392	100,443
-5	4.007	3.56	-5.06	67,397	72,127	76,857
0	3.120	2.70	-4.90	52,967	56,167	59,368
5	2.449	1.96	-4.75	41,901	44,087	46,274
10	1.937	1.33	-4.60	33,360	34,869	36,379
15	1.543	0.80	-4.46	26,725	27,780	28,835
20	1.238	0.36	-4.33	21,538	22,287	23,035
25	1.000	0.00	-4.20	17,460	18,000	18,540
30	0.8128	0.35	-4.07	14,142	14,631	15,121
35	0.6648	0.74	-3.95	11,519	11,966	12,414
40	0.5469	1.17	-3.84	9,433.7	9,844.7	10,256
45	0.4525	1.65	-3.73	7,766.7	8,145.3	8,523.9
50	0.3764	2.16	-3.62	6,426.6	6,776.0	7,125.4
55	0.3148	2.69	-3.52	5,343.9	5,666.6	5,989.2
60	0.2646	3.26	-3.42	4,464.5	4,762.6	5,060.7
65	0.2235	3.85	-3.33	3,746.8	4,022.3	4,297.7
70	0.1896	4.46	-3.24	3,158.3	3,412.8	3,667.4
75	0.1616	5.09	-3.15	2,673.5	2,908.7	3,143.9
80	0.1383	5.73	-3.07	2,272.4	2,489.8	2,707.2
85	0.1189	6.39	-2.98	1,939.1	2,140.0	2,341.0
90	0.1026	7.06	-2.91	1,661.0	1,846.8	2,032.5
95	0.0889	7.74	-2.83	1,428.0	1,599.8	1,771.7
100	0.0773	8.43	-2.76	1,232.1	1,391.1	1,550.1
105	0.0674	9.13	-2.69	1,066.6	1,213.9	1,361.1
110	0.0590	9.83	-2.62	926.5	1,062.9	1,199.3
115	0.0519	10.54	-2.56	807.4	933.8	1,060.2
120	0.0457	11.25	-2.49	705.7	823.0	940.3
125	0.0404	11.97	-2.43	618.7	727.6	836.5
130	0.0358	12.69	-2.37	544.0	645.2	746.4
135	0.0319	13.41	-2.32	479.7	573.8	667.9
140	0.0284	14.13	-2.26	424.1	511.7	599.3
145	0.0254	14.85	-2.21	375.9	457.6	539.2
150	0.0228	15.57	-2.16	334.1	410.2	486.4