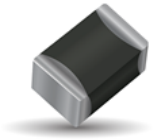
NB12L00123JBF

(0805, 12 kOhm ±5%, 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	0805
Operating temperature	-55°C to +150°C
Resistance	12 kOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	3790K±3%
Maximum dissipation at 25°C	0.12 W
Thermal dissipation factor	2 mW/°C
Thermal time constant	5 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

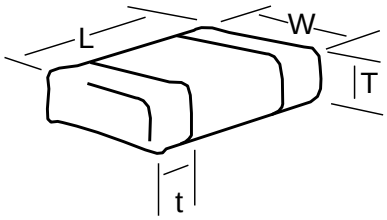
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0805	2.0±0.3	1.25±0.2	1.3 max	0.2 min
	(0.079±0.012)	(0.049±0.008)	(0.051) max	(0.008) min



How to Order (Packaging options)

NB — **Type**
NB = Ni/Sn Term for lead free soldering

12 — **Size**
12 = 0805

L0 — **Material Code**
See Datasheet

0123 — **Resistance (Ohm)**
2 Sig. Digits + Number of Zeros

J — **Tolerance**
H = ±3%*
J = ±5%
K = ±10%
M = ±20%

* For selected PNs

BF — **Suffix: Packaging**
BB = Cardboard tape (180mm reel, 4,000 pcs/reel)
BF = Cardboard tape (180mm reel, 2,000 pcs/reel)
BD = Cardboard 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	720,108	990,516	1,260,924
-50	58.03	19.27	-6.87	527,356	696,327	865,298
-45	41.31	16.57	-6.63	388,774	495,664	602,554
-40	29.75	14.16	-6.40	288,633	357,054	425,475
-35	21.68	12.03	-6.18	215,845	260,145	304,444
-30	15.97	10.14	-5.98	162,602	191,605	220,608
-25	11.88	8.46	-5.78	123,396	142,593	161,790
-20	8.931	6.99	-5.59	94,328	107,174	120,020
-15	6.777	5.69	-5.40	72,628	81,318	90,009
-10	5.188	4.55	-5.23	56,316	62,261	68,207
-5	4.007	3.56	-5.06	43,970	48,085	52,200
0	3.120	2.70	-4.90	34,562	37,445	40,328
5	2.449	1.96	-4.75	27,346	29,392	31,437
10	1.937	1.33	-4.60	21,775	23,246	24,718
15	1.543	0.80	-4.46	17,446	18,520	19,594
20	1.238	0.36	-4.33	14,062	14,858	15,654
25	1.000	0.00	-4.20	11,400	12,000	12,600
30	0.8128	0.35	-4.07	9,232.7	9,754.1	10,276
35	0.6648	0.74	-3.95	7,519.7	7,977.5	8,435.3
40	0.5469	1.17	-3.84	6,157.9	6,563.1	6,968.3
45	0.4525	1.65	-3.73	5,069.2	5,430.2	5,791.2
50	0.3764	2.16	-3.62	4,194.1	4,517.4	4,840.6
55	0.3148	2.69	-3.52	3,487.0	3,777.7	4,068.4
60	0.2646	3.26	-3.42	2,912.8	3,175.1	3,437.3
65	0.2235	3.85	-3.33	2,444.2	2,681.5	2,918.8
70	0.1896	4.46	-3.24	2,060.0	2,275.2	2,490.4
75	0.1616	5.09	-3.15	1,743.6	1,939.2	2,134.7
80	0.1383	5.73	-3.07	1,481.7	1,659.9	1,838.0
85	0.1189	6.39	-2.98	1,264.2	1,426.7	1,589.2
90	0.1026	7.06	-2.91	1,082.7	1,231.2	1,379.6
95	0.0889	7.74	-2.83	930.7	1,066.6	1,202.4
100	0.0773	8.43	-2.76	802.8	927.4	1,051.9
105	0.0674	9.13	-2.69	694.9	809.2	923.6
110	0.0590	9.83	-2.62	603.5	708.6	813.7
115	0.0519	10.54	-2.56	525.8	622.5	719.3
120	0.0457	11.25	-2.49	459.5	548.7	637.9
125	0.0404	11.97	-2.43	402.8	485.1	567.4
130	0.0358	12.69	-2.37	354.1	430.1	506.2
135	0.0319	13.41	-2.32	312.1	382.5	452.9
140	0.0284	14.13	-2.26	275.9	341.1	406.4
145	0.0254	14.85	-2.21	244.5	305.0	365.6
150	0.0228	15.57	-2.16	217.2	273.5	329.7