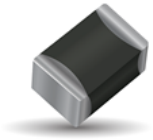
NB12P00124JBD

(0805, 120 kOhm ±5%, 4220K, 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	120 kOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	4220K±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

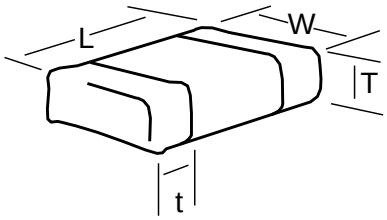
MSL 1
Pb Free
260°C

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

P0 — **Material Code**
See Datasheet

0124 — **Resistance (Ohm)**
2 Sig. Digits + Number of Zeros

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

* For selected PNs

BD — **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

P0 (B25/85 = 4220K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4181 K	4211 K	4220 K	4232 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	121.4	24.83	-7.56	10,220,755	14,565,769	18,910,782
-50	83.35	21.45	-7.32	7,355,969	10,001,639	12,647,310
-45	57.92	18.44	-7.09	5,321,259	6,950,879	8,580,499
-40	40.72	15.77	-6.87	3,871,901	4,886,899	5,901,897
-35	28.95	13.39	-6.66	2,835,173	3,474,212	4,113,252
-30	20.80	11.29	-6.45	2,089,847	2,496,447	2,903,047
-25	15.10	9.42	-6.26	1,550,990	1,812,399	2,073,808
-20	11.07	7.78	-6.07	1,159,051	1,328,865	1,498,678
-15	8.197	6.33	-5.89	872,177	983,651	1,095,125
-10	6.123	5.07	-5.71	660,851	734,817	808,783
-5	4.615	3.96	-5.54	504,163	553,792	603,421
0	3.508	3.00	-5.38	387,227	420,921	454,616
5	2.688	2.18	-5.22	299,391	322,556	345,722
10	2.076	1.48	-5.07	232,987	249,132	265,276
15	1.616	0.89	-4.92	182,467	193,886	205,304
20	1.267	0.40	-4.78	143,791	151,997	160,203
25	1.000	0.00	-4.64	114,000	120,000	126,000
30	0.7949	0.38	-4.51	90,247	95,383	100,520
35	0.6359	0.82	-4.38	71,871	76,314	80,757
40	0.5120	1.31	-4.26	57,567	61,443	65,318
45	0.4148	1.84	-4.14	46,369	49,771	53,173
50	0.3379	2.40	-4.03	37,552	40,553	43,554
55	0.2769	3.00	-3.92	30,571	33,229	35,888
60	0.2281	3.63	-3.81	25,015	27,377	29,740
65	0.1890	4.28	-3.71	20,569	22,674	24,780
70	0.1573	4.96	-3.61	16,994	18,875	20,756
75	0.1316	5.66	-3.52	14,105	15,789	17,473
80	0.1106	6.38	-3.42	11,760	13,270	14,780
85	0.0934	7.11	-3.34	9,846.9	11,204	12,561
90	0.0792	7.86	-3.25	8,279.4	9,501.4	10,723
95	0.0674	8.62	-3.17	6,989.7	8,091.7	9,193.7
100	0.0577	9.39	-3.09	5,924.0	6,919.5	7,915.0
105	0.0495	10.16	-3.01	5,039.8	5,940.6	6,841.4
110	0.0427	10.95	-2.93	4,303.3	5,119.7	5,936.2
115	0.0369	11.74	-2.86	3,687.4	4,428.6	5,169.9
120	0.0320	12.53	-2.79	3,170.6	3,844.6	4,518.5
125	0.0279	13.33	-2.72	2,735.3	3,349.1	3,962.9
130	0.0244	14.13	-2.66	2,367.3	2,927.2	3,487.1
135	0.0214	14.93	-2.59	2,055.2	2,566.7	3,078.2
140	0.0188	15.73	-2.53	1,789.7	2,257.7	2,725.7
145	0.0166	16.53	-2.47	1,563.0	1,991.9	2,420.8
150	0.0147	17.33	-2.42	1,369.0	1,762.6	2,156.2