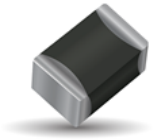
NB12P00184J--

(0805, 180 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	180 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

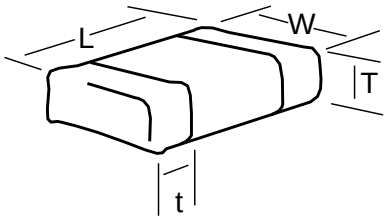
MSL 1
Pb Free
260°C

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	12	P0	0184	J	--
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	12 = 0805	See Datasheet	2 Sig. Digits + Number of Zeros	H = ±3%* J = ±5% K = ±10% M = ±20%	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)

* 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

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	15,331,133	21,848,653	28,366,173
-50	83.35	21.45	-7.32	11,033,953	15,002,459	18,970,965
-45	57.92	18.44	-7.09	7,981,889	10,426,319	12,870,749
-40	40.72	15.77	-6.87	5,807,851	7,330,348	8,852,846
-35	28.95	13.39	-6.66	4,252,759	5,211,318	6,169,878
-30	20.80	11.29	-6.45	3,134,771	3,744,671	4,354,571
-25	15.10	9.42	-6.26	2,326,485	2,718,598	3,110,711
-20	11.07	7.78	-6.07	1,738,576	1,993,297	2,248,018
-15	8.197	6.33	-5.89	1,308,266	1,475,476	1,642,687
-10	6.123	5.07	-5.71	991,277	1,102,226	1,213,174
-5	4.615	3.96	-5.54	756,245	830,688	905,131
0	3.508	3.00	-5.38	580,841	631,382	681,923
5	2.688	2.18	-5.22	449,086	483,834	518,583
10	2.076	1.48	-5.07	349,480	373,697	397,915
15	1.616	0.89	-4.92	273,700	290,828	307,957
20	1.267	0.40	-4.78	215,686	227,996	240,305
25	1.000	0.00	-4.64	171,000	180,000	189,000
30	0.7949	0.38	-4.51	135,371	143,075	150,779
35	0.6359	0.82	-4.38	107,806	114,471	121,136
40	0.5120	1.31	-4.26	86,351	92,164	97,978
45	0.4148	1.84	-4.14	69,553	74,656	79,759
50	0.3379	2.40	-4.03	56,327	60,830	65,332
55	0.2769	3.00	-3.92	45,857	49,844	53,832
60	0.2281	3.63	-3.81	37,522	41,066	44,610
65	0.1890	4.28	-3.71	30,854	34,012	37,170
70	0.1573	4.96	-3.61	25,491	28,312	31,133
75	0.1316	5.66	-3.52	21,158	23,684	26,209
80	0.1106	6.38	-3.42	17,640	19,905	22,171
85	0.0934	7.11	-3.34	14,770	16,806	18,842
90	0.0792	7.86	-3.25	12,419	14,252	16,085
95	0.0674	8.62	-3.17	10,485	12,138	13,791
100	0.0577	9.39	-3.09	8,886.0	10,379	11,873
105	0.0495	10.16	-3.01	7,559.6	8,910.9	10,262
110	0.0427	10.95	-2.93	6,454.9	7,679.6	8,904.3
115	0.0369	11.74	-2.86	5,531.1	6,643.0	7,754.8
120	0.0320	12.53	-2.79	4,755.9	5,766.8	6,777.8
125	0.0279	13.33	-2.72	4,102.9	5,023.6	5,944.3
130	0.0244	14.13	-2.66	3,551.0	4,390.8	5,230.6
135	0.0214	14.93	-2.59	3,082.9	3,850.1	4,617.3
140	0.0188	15.73	-2.53	2,684.6	3,386.6	4,088.6
145	0.0166	16.53	-2.47	2,344.6	2,987.9	3,631.2
150	0.0147	17.33	-2.42	2,053.4	2,643.8	3,234.3