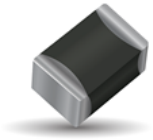
NB12P00154J--

(0805, 150 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	150 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

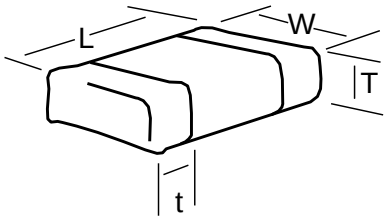
MSL 1
Pb Free
260°C

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	0154	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

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	12,775,944	18,207,211	23,638,478
-50	83.35	21.45	-7.32	9,194,961	12,502,049	15,809,138
-45	57.92	18.44	-7.09	6,651,574	8,688,599	10,725,624
-40	40.72	15.77	-6.87	4,839,876	6,108,624	7,377,371
-35	28.95	13.39	-6.66	3,543,966	4,342,765	5,141,565
-30	20.80	11.29	-6.45	2,612,309	3,120,559	3,628,809
-25	15.10	9.42	-6.26	1,938,738	2,265,499	2,592,259
-20	11.07	7.78	-6.07	1,448,813	1,661,081	1,873,348
-15	8.197	6.33	-5.89	1,090,221	1,229,564	1,368,906
-10	6.123	5.07	-5.71	826,064	918,521	1,010,978
-5	4.615	3.96	-5.54	630,204	692,240	754,276
0	3.508	3.00	-5.38	484,034	526,152	568,269
5	2.688	2.18	-5.22	374,238	403,195	432,152
10	2.076	1.48	-5.07	291,234	311,415	331,595
15	1.616	0.89	-4.92	228,084	242,357	256,631
20	1.267	0.40	-4.78	179,738	189,996	200,254
25	1.000	0.00	-4.64	142,500	150,000	157,500
30	0.7949	0.38	-4.51	112,809	119,229	125,649
35	0.6359	0.82	-4.38	89,838	95,392	100,947
40	0.5120	1.31	-4.26	71,959	76,803	81,648
45	0.4148	1.84	-4.14	57,961	62,214	66,466
50	0.3379	2.40	-4.03	46,940	50,691	54,443
55	0.2769	3.00	-3.92	38,214	41,537	44,860
60	0.2281	3.63	-3.81	31,268	34,222	37,175
65	0.1890	4.28	-3.71	25,711	28,343	30,975
70	0.1573	4.96	-3.61	21,243	23,594	25,944
75	0.1316	5.66	-3.52	17,632	19,736	21,841
80	0.1106	6.38	-3.42	14,700	16,588	18,476
85	0.0934	7.11	-3.34	12,309	14,005	15,702
90	0.0792	7.86	-3.25	10,349	11,877	13,404
95	0.0674	8.62	-3.17	8,737.1	10,115	11,492
100	0.0577	9.39	-3.09	7,405.0	8,649.4	9,893.8
105	0.0495	10.16	-3.01	6,299.7	7,425.7	8,551.8
110	0.0427	10.95	-2.93	5,379.1	6,399.7	7,420.3
115	0.0369	11.74	-2.86	4,609.3	5,535.8	6,462.3
120	0.0320	12.53	-2.79	3,963.2	4,805.7	5,648.2
125	0.0279	13.33	-2.72	3,419.1	4,186.3	4,953.6
130	0.0244	14.13	-2.66	2,959.1	3,659.0	4,358.8
135	0.0214	14.93	-2.59	2,569.1	3,208.4	3,847.8
140	0.0188	15.73	-2.53	2,237.1	2,822.1	3,407.2
145	0.0166	16.53	-2.47	1,953.8	2,489.9	3,026.0
150	0.0147	17.33	-2.42	1,711.2	2,203.2	2,695.2