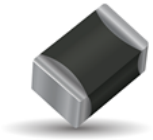
NB21N50104M--

(0603, 100 kOhm ±20%, 4160K, 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	0603
Operating temperature	-55°C to +150°C
Resistance	100 kOhm
Tolerance on Resistance (25°C)	±20%
B 25/85	4160K±3%
Maximum dissipation at 25°C	0.07 W
Thermal dissipation factor	1 mW/°C
Thermal time constant	4 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

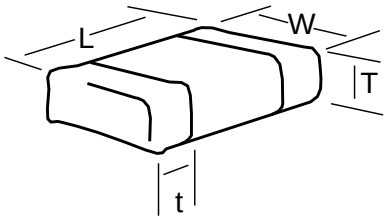
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0603	1.6±0.2	0.8±0.2	1.0 max	0.2 min
	(0.063±0.008)	(0.031±0.008)	(0.039) max	(0.008) min



How to Order (Packaging options)

NB	21	N5	0104	M	--
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	21 = 0603	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

N5 (B25/85 = 4160K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4124 K	4151 K	4160 K	4171 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	115.8	16.32	-7.52	7,376,799	11,583,639	15,790,480
-50	79.72	14.10	-7.28	5,254,014	7,972,380	10,690,746
-45	55.54	12.12	-7.04	3,770,222	5,554,320	7,338,417
-40	39.15	10.36	-6.82	2,726,458	3,915,244	5,104,030
-35	27.91	8.80	-6.61	1,987,181	2,791,050	3,594,919
-30	20.11	7.42	-6.40	1,459,810	2,011,236	2,562,662
-25	14.64	6.19	-6.20	1,080,838	1,464,401	1,847,964
-20	10.77	5.11	-6.01	806,483	1,076,916	1,347,350
-15	7.996	4.16	-5.83	606,388	799,577	992,767
-10	5.991	3.33	-5.65	459,373	599,149	738,924
-5	4.529	2.60	-5.48	350,568	452,950	555,332
0	3.454	1.97	-5.31	269,461	345,351	421,240
5	2.655	1.43	-5.16	208,574	265,475	322,376
10	2.057	0.97	-5.00	162,548	205,687	248,825
15	1.606	0.58	-4.86	127,521	160,575	193,628
20	1.263	0.26	-4.72	100,688	126,274	151,860
25	1.000	0.00	-4.58	80,000	100,000	120,000
30	0.7973	0.25	-4.45	63,582	79,729	95,877
35	0.6398	0.54	-4.32	50,840	63,983	77,125
40	0.5167	0.86	-4.20	40,891	51,668	62,446
45	0.4198	1.21	-4.09	33,075	41,977	50,879
50	0.3430	1.58	-3.97	26,900	34,302	41,704
55	0.2819	1.97	-3.86	21,994	28,188	34,381
60	0.2329	2.39	-3.76	18,076	23,289	28,502
65	0.1934	2.82	-3.66	14,929	19,342	23,755
70	0.1614	3.26	-3.56	12,389	16,144	19,900
75	0.1354	3.72	-3.46	10,329	13,541	16,753
80	0.1141	4.19	-3.37	8,650	11,410	14,171
85	0.0966	4.67	-3.29	7,275	9,658	12,042
90	0.0821	5.17	-3.20	6,145	8,211	10,277
95	0.0701	5.66	-3.12	5,211	7,010	8,809
100	0.0601	6.17	-3.04	4,436	6,009	7,581
105	0.0517	6.68	-2.96	3,791	5,171	6,550
110	0.0447	7.19	-2.89	3,252	4,467	5,681
115	0.0387	7.71	-2.82	2,799	3,872	4,945
120	0.0337	8.23	-2.75	2,418	3,369	4,320
125	0.0294	8.76	-2.68	2,095	2,941	3,787
130	0.0258	9.28	-2.62	1,822	2,576	3,330
135	0.0226	9.81	-2.55	1,589	2,263	2,938
140	0.0199	10.34	-2.49	1,390	1,995	2,600
145	0.0176	10.86	-2.44	1,219	1,763	2,308
150	0.0156	11.39	-2.38	1,073	1,563	2,054