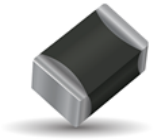
NB20N50104JBE

(1206, 100 kOhm ±5%, 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	1206
Operating temperature	-55°C to +150°C
Resistance	100 kOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	4160K±3%
Maximum dissipation at 25°C	0.24 W
Thermal dissipation factor	4 mW/°C
Thermal time constant	7 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

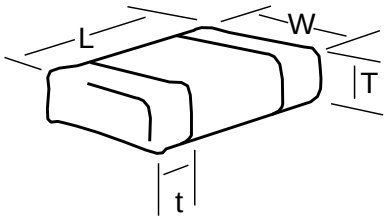
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions WWWW

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
1206	3.2±0.4	1.6±0.25	1.5 max	0.2 min
	(0.126±0.016)	(0.063±0.01)	(0.059) max	(0.008) min



How to Order (Packaging options)

NB	20	N5	0104	J	BE
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	20 = 1206	See Datasheet	2 Sig. Digits + Number of Zeros	H = ±3%* J = ±5% K = ±10% M = ±20% * For selected PNs	BA = Plastic tape (180mm reel, 3,000 pcs/reel) BE = Plastic tape (180mm reel, 1,500 pcs/reel) BC = Plastic 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

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	9,114,345	11,583,639	14,052,934
-50	79.72	14.10	-7.28	6,449,870	7,972,380	9,494,889
-45	55.54	12.12	-7.04	4,603,370	5,554,320	6,505,269
-40	39.15	10.36	-6.82	3,313,744	3,915,244	4,516,743
-35	27.91	8.80	-6.61	2,405,839	2,791,050	3,176,261
-30	20.11	7.42	-6.40	1,761,495	2,011,236	2,260,977
-25	14.64	6.19	-6.20	1,300,498	1,464,401	1,628,304
-20	10.77	5.11	-6.01	968,020	1,076,916	1,185,813
-15	7.996	4.16	-5.83	726,324	799,577	872,830
-10	5.991	3.33	-5.65	549,245	599,149	649,052
-5	4.529	2.60	-5.48	418,510	452,950	487,389
0	3.454	1.97	-5.31	321,264	345,351	369,438
5	2.655	1.43	-5.16	248,395	265,475	282,555
10	2.057	0.97	-5.00	193,401	205,687	217,972
15	1.606	0.58	-4.86	151,608	160,575	169,542
20	1.263	0.26	-4.72	119,630	126,274	132,919
25	1.000	0.00	-4.58	95,000	100,000	105,000
30	0.7973	0.25	-4.45	75,541	79,729	83,917
35	0.6398	0.54	-4.32	60,438	63,983	67,528
40	0.5167	0.86	-4.20	48,641	51,668	54,696
45	0.4198	1.21	-4.09	39,372	41,977	44,582
50	0.3430	1.58	-3.97	32,046	34,302	36,558
55	0.2819	1.97	-3.86	26,223	28,188	30,153
60	0.2329	2.39	-3.76	21,569	23,289	25,009
65	0.1934	2.82	-3.66	17,830	19,342	20,853
70	0.1614	3.26	-3.56	14,810	16,144	17,478
75	0.1354	3.72	-3.46	12,360	13,541	14,722
80	0.1141	4.19	-3.37	10,361	11,410	12,459
85	0.0966	4.67	-3.29	8,724.0	9,658.4	10,593
90	0.0821	5.17	-3.20	7,376.4	8,211.1	9,045.8
95	0.0701	5.66	-3.12	6,262.4	7,010.0	7,757.5
100	0.0601	6.17	-3.04	5,337.7	6,008.8	6,680.0
105	0.0517	6.68	-2.96	4,566.9	5,170.9	5,774.8
110	0.0447	7.19	-2.89	3,921.9	4,466.6	5,011.2
115	0.0387	7.71	-2.82	3,380.0	3,872.3	4,364.6
120	0.0337	8.23	-2.75	2,923.1	3,368.9	3,814.8
125	0.0294	8.76	-2.68	2,536.4	2,941.0	3,345.6
130	0.0258	9.28	-2.62	2,208.0	2,575.9	2,943.8
135	0.0226	9.81	-2.55	1,928.1	2,263.3	2,598.5
140	0.0199	10.34	-2.49	1,688.8	1,994.8	2,300.7
145	0.0176	10.86	-2.44	1,483.6	1,763.3	2,043.0
150	0.0156	11.39	-2.38	1,307.0	1,563.2	1,819.4