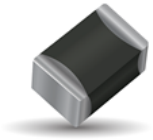
NB12SC0104K--

(0805, 100 kOhm ±10%, 4500K, 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	100 kOhm
Tolerance on Resistance (25°C)	±10%
B 25/85	4500K±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

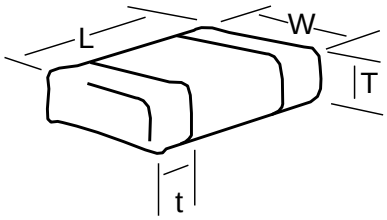
MSL 1
Pb Free
260°C

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	SC	0104	K	--
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

SC (B25/85 = 4500K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4405 K	4474 K	4500 K	4534 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	129.8	26.47	-7.51	8,243,847	12,977,225	17,710,604
-50	89.31	22.87	-7.29	5,995,196	8,931,109	11,867,023
-45	62.15	19.67	-7.07	4,371,554	6,215,436	8,059,317
-40	43.72	16.81	-6.87	3,199,619	4,371,900	5,544,182
-35	31.07	14.28	-6.68	2,352,399	3,106,737	3,861,075
-30	22.29	12.03	-6.49	1,738,167	2,229,407	2,720,646
-25	16.15	10.05	-6.31	1,291,171	1,614,919	1,938,668
-20	11.80	8.29	-6.14	964,449	1,180,389	1,396,329
-15	8.703	6.75	-5.97	724,489	870,277	1,016,066
-10	6.470	5.40	-5.81	547,351	646,997	746,643
-5	4.849	4.22	-5.66	415,898	484,865	553,832
0	3.662	3.20	-5.51	317,821	366,170	414,518
5	2.786	2.33	-5.36	244,249	278,588	312,928
10	2.135	1.58	-5.23	188,757	213,474	238,191
15	1.647	0.95	-5.09	146,675	164,708	182,741
20	1.279	0.43	-4.96	114,591	127,928	141,265
25	1.000	0.00	-4.84	90,000	100,000	110,000
30	0.7865	0.41	-4.72	70,465	78,653	86,841
35	0.6223	0.88	-4.60	55,465	62,234	69,003
40	0.4953	1.39	-4.49	43,883	49,526	55,170
45	0.3963	1.96	-4.38	34,895	39,634	44,373
50	0.3189	2.56	-4.28	27,883	31,889	35,894
55	0.2579	3.20	-4.18	22,387	25,791	29,195
60	0.2096	3.87	-4.08	18,057	20,965	23,872
65	0.1712	4.57	-3.99	14,630	17,125	19,619
70	0.1405	5.29	-3.89	11,905	14,054	16,203
75	0.1159	6.04	-3.80	9,728.6	11,587	13,445
80	0.0960	6.80	-3.72	7,982.9	9,595.2	11,208
85	0.0798	7.58	-3.63	6,576.8	7,980.0	9,383.3
90	0.0666	8.38	-3.55	5,439.4	6,664.3	7,889.3
95	0.0559	9.19	-3.47	4,515.7	5,588.0	6,660.3
100	0.0470	10.01	-3.40	3,762.7	4,703.8	5,645.0
105	0.0397	10.84	-3.32	3,146.4	3,974.6	4,802.8
110	0.0337	11.67	-3.25	2,640.2	3,370.7	4,101.3
115	0.0287	12.51	-3.18	2,222.9	2,868.8	3,514.7
120	0.0245	13.36	-3.12	1,877.8	2,450.1	3,022.5
125	0.0210	14.21	-3.05	1,591.3	2,099.6	2,607.9
130	0.0181	15.06	-2.99	1,352.6	1,805.0	2,257.4
135	0.0156	15.92	-2.92	1,153.3	1,556.7	1,960.2
140	0.0135	16.77	-2.86	986.2	1,346.7	1,707.2
145	0.0117	17.63	-2.80	845.7	1,168.5	1,491.3
150	0.0102	18.48	-2.75	727.2	1,016.8	1,306.4