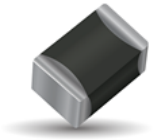
NB21K00103J--

(0603, 10 kOhm ±5%, 3630K, 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	10 kOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	3630K±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

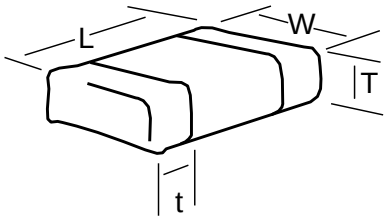
MSL 1
Pb Free 260°C

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	K0	0103	J	--
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

K0 (B25/85 = 3630K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3581 K	3618 K	3630 K	3646 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	56.27	21.36	-6.25	414,385	562,688	710,991
-50	41.22	18.45	-6.06	315,534	412,197	508,861
-45	30.48	15.86	-5.89	241,188	304,777	368,366
-40	22.74	13.56	-5.71	185,169	227,378	269,587
-35	17.11	11.52	-5.55	142,839	171,105	199,371
-30	12.98	9.71	-5.39	110,738	129,834	148,929
-25	9.931	8.10	-5.24	86,296	99,310	112,325
-20	7.655	6.69	-5.09	67,603	76,553	85,502
-15	5.945	5.45	-4.95	53,242	59,453	65,663
-10	4.651	4.36	-4.81	42,155	46,506	50,858
-5	3.663	3.41	-4.67	33,553	36,633	39,713
0	2.905	2.58	-4.54	26,847	29,050	31,254
5	2.319	1.88	-4.42	21,593	23,187	24,782
10	1.862	1.27	-4.30	17,456	18,624	19,793
15	1.505	0.77	-4.18	14,182	15,050	15,918
20	1.223	0.34	-4.07	11,580	12,233	12,887
25	1.000	0.00	-3.96	9,500	10,000	10,500
30	0.8219	0.33	-3.85	7,781	8,219	8,658
35	0.6792	0.71	-3.75	6,404	6,792	7,179
40	0.5641	1.12	-3.65	5,295	5,641	5,986
45	0.4708	1.58	-3.55	4,398	4,708	5,018
50	0.3949	2.07	-3.46	3,670	3,949	4,227
55	0.3327	2.58	-3.37	3,075	3,327	3,579
60	0.2816	3.12	-3.28	2,587	2,816	3,044
65	0.2393	3.69	-3.20	2,185	2,393	2,601
70	0.2043	4.27	-3.12	1,853	2,043	2,232
75	0.1751	4.87	-3.04	1,578	1,751	1,924
80	0.1506	5.49	-2.96	1,348	1,506	1,664
85	0.1301	6.12	-2.89	1,156	1,301	1,446
90	0.1128	6.76	-2.82	995.1	1,128	1,260
95	0.0981	7.41	-2.75	859.3	981.1	1,103
100	0.0856	8.07	-2.68	744.5	856.4	968.4
105	0.0750	8.74	-2.61	647.0	750.1	853.2
110	0.0659	9.42	-2.55	564.1	659.1	754.1
115	0.0581	10.09	-2.49	493.2	580.9	668.6
120	0.0514	10.78	-2.43	432.6	513.6	594.6
125	0.0455	11.46	-2.37	380.4	455.4	530.4
130	0.0405	12.15	-2.32	335.5	404.9	474.4
135	0.0361	12.84	-2.26	296.7	361.1	425.5
140	0.0323	13.53	-2.21	263.0	322.8	382.6
145	0.0289	14.22	-2.16	233.7	289.3	344.9
150	0.0260	14.91	-2.11	208.2	260.0	311.7