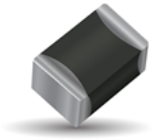
NB12K00682K--

(0805, 6800 Ohm ±10%, 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	0805
Operating temperature	-55°C to +150°C
Resistance	6800 Ohm
Tolerance on Resistance (25°C)	±10%
B 25/85	3630K±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

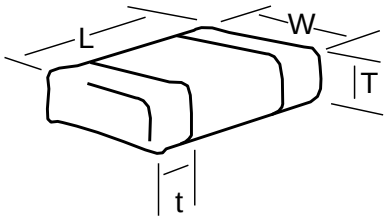
MSL 1
Pb Free
260°C

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	K0	0682	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

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	262,651	382,628	502,605
-50	41.22	18.45	-6.06	200,548	280,294	360,040
-45	30.48	15.86	-5.89	153,645	207,248	260,851
-40	22.74	13.56	-5.71	118,184	154,617	191,050
-35	17.11	11.52	-5.55	91,313	116,351	141,390
-30	12.98	9.71	-5.39	70,887	88,287	105,686
-25	9.931	8.10	-5.24	55,305	67,531	79,757
-20	7.655	6.69	-5.09	43,368	52,056	60,744
-15	5.945	5.45	-4.95	34,183	40,428	46,673
-10	4.651	4.36	-4.81	27,084	31,624	36,164
-5	3.663	3.41	-4.67	21,571	24,910	28,250
0	2.905	2.58	-4.54	17,268	19,754	22,240
5	2.319	1.88	-4.42	13,895	15,767	17,640
10	1.862	1.27	-4.30	11,237	12,664	14,092
15	1.505	0.77	-4.18	9,132.3	10,234	11,336
20	1.223	0.34	-4.07	7,458.1	8,318.5	9,178.9
25	1.000	0.00	-3.96	6,120.0	6,800.0	7,480.0
30	0.8219	0.33	-3.85	5,011.8	5,589.2	6,166.6
35	0.6792	0.71	-3.75	4,123.8	4,618.3	5,112.8
40	0.5641	1.12	-3.65	3,409.0	3,835.7	4,262.4
45	0.4708	1.58	-3.55	2,830.8	3,201.5	3,572.2
50	0.3949	2.07	-3.46	2,361.0	2,685.0	3,008.9
55	0.3327	2.58	-3.37	1,977.6	2,262.2	2,546.8
60	0.2816	3.12	-3.28	1,663.4	1,914.6	2,165.8
65	0.2393	3.69	-3.20	1,404.7	1,627.4	1,850.1
70	0.2043	4.27	-3.12	1,190.9	1,389.1	1,587.3
75	0.1751	4.87	-3.04	1,013.5	1,190.5	1,367.6
80	0.1506	5.49	-2.96	865.7	1,024.3	1,183.0
85	0.1301	6.12	-2.89	742.1	884.7	1,027.3
90	0.1128	6.76	-2.82	638.4	766.9	895.4
95	0.0981	7.41	-2.75	551.0	667.1	783.3
100	0.0856	8.07	-2.68	477.1	582.4	687.6
105	0.0750	8.74	-2.61	414.5	510.1	605.7
110	0.0659	9.42	-2.55	361.2	448.2	535.2
115	0.0581	10.09	-2.49	315.7	395.0	474.4
120	0.0514	10.78	-2.43	276.7	349.2	421.8
125	0.0455	11.46	-2.37	243.2	309.7	376.1
130	0.0405	12.15	-2.32	214.4	275.4	336.4
135	0.0361	12.84	-2.26	189.4	245.5	301.6
140	0.0323	13.53	-2.21	167.9	219.5	271.1
145	0.0289	14.22	-2.16	149.1	196.7	244.4
150	0.0260	14.91	-2.11	132.8	176.8	220.8