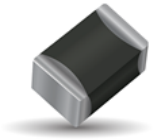
NB12K00682J--

(0805, 6800 Ohm ±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	0805
Operating temperature	-55°C to +150°C
Resistance	6800 Ohm
Tolerance on Resistance (25°C)	±5%
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

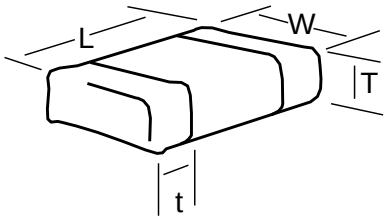
MSL 1
Pb Free
260°C

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	J	--
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

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	281,782	382,628	483,474
-50	41.22	18.45	-6.06	214,563	280,294	346,025
-45	30.48	15.86	-5.89	164,008	207,248	250,489
-40	22.74	13.56	-5.71	125,915	154,617	183,319
-35	17.11	11.52	-5.55	97,130	116,351	135,572
-30	12.98	9.71	-5.39	75,302	88,287	101,272
-25	9.931	8.10	-5.24	58,681	67,531	76,381
-20	7.655	6.69	-5.09	45,970	52,056	58,142
-15	5.945	5.45	-4.95	36,204	40,428	44,651
-10	4.651	4.36	-4.81	28,665	31,624	34,583
-5	3.663	3.41	-4.67	22,816	24,910	27,005
0	2.905	2.58	-4.54	18,256	19,754	21,253
5	2.319	1.88	-4.42	14,683	15,767	16,852
10	1.862	1.27	-4.30	11,870	12,664	13,459
15	1.505	0.77	-4.18	9,644.0	10,234	10,824
20	1.223	0.34	-4.07	7,874.1	8,318.5	8,763.0
25	1.000	0.00	-3.96	6,460.0	6,800.0	7,140.0
30	0.8219	0.33	-3.85	5,291.2	5,589.2	5,887.1
35	0.6792	0.71	-3.75	4,354.8	4,618.3	4,881.9
40	0.5641	1.12	-3.65	3,600.8	3,835.7	4,070.6
45	0.4708	1.58	-3.55	2,990.9	3,201.5	3,412.1
50	0.3949	2.07	-3.46	2,495.3	2,685.0	2,874.7
55	0.3327	2.58	-3.37	2,090.8	2,262.2	2,433.7
60	0.2816	3.12	-3.28	1,759.1	1,914.6	2,070.1
65	0.2393	3.69	-3.20	1,486.1	1,627.4	1,768.8
70	0.2043	4.27	-3.12	1,260.4	1,389.1	1,517.9
75	0.1751	4.87	-3.04	1,073.0	1,190.5	1,308.0
80	0.1506	5.49	-2.96	916.9	1,024.3	1,131.8
85	0.1301	6.12	-2.89	786.3	884.7	983.1
90	0.1128	6.76	-2.82	676.7	766.9	857.1
95	0.0981	7.41	-2.75	584.3	667.1	750.0
100	0.0856	8.07	-2.68	506.2	582.4	658.5
105	0.0750	8.74	-2.61	440.0	510.1	580.2
110	0.0659	9.42	-2.55	383.6	448.2	512.8
115	0.0581	10.09	-2.49	335.4	395.0	454.7
120	0.0514	10.78	-2.43	294.1	349.2	404.3
125	0.0455	11.46	-2.37	258.7	309.7	360.7
130	0.0405	12.15	-2.32	228.1	275.4	322.6
135	0.0361	12.84	-2.26	201.7	245.5	289.3
140	0.0323	13.53	-2.21	178.8	219.5	260.2
145	0.0289	14.22	-2.16	158.9	196.7	234.6
150	0.0260	14.91	-2.11	141.6	176.8	212.0