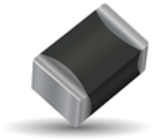
NB12K00682MBB

(0805, 6800 Ohm ±20%, 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)	±20%
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

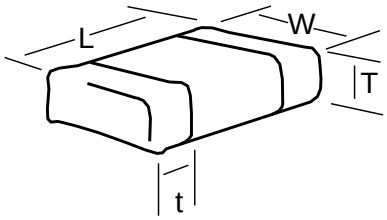
MSL 1
Pb Free
260°C

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	M	BB
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	224,388	382,628	540,868
-50	41.22	18.45	-6.06	172,519	280,294	388,070
-45	30.48	15.86	-5.89	132,921	207,248	281,576
-40	22.74	13.56	-5.71	102,722	154,617	206,512
-35	17.11	11.52	-5.55	79,678	116,351	153,025
-30	12.98	9.71	-5.39	62,059	88,287	114,515
-25	9.931	8.10	-5.24	48,552	67,531	86,511
-20	7.655	6.69	-5.09	38,162	52,056	65,950
-15	5.945	5.45	-4.95	30,140	40,428	50,715
-10	4.651	4.36	-4.81	23,921	31,624	39,327
-5	3.663	3.41	-4.67	19,080	24,910	30,741
0	2.905	2.58	-4.54	15,293	19,754	24,216
5	2.319	1.88	-4.42	12,318	15,767	19,217
10	1.862	1.27	-4.30	9,970.3	12,664	15,359
15	1.505	0.77	-4.18	8,108.9	10,234	12,359
20	1.223	0.34	-4.07	6,626.3	8,318.5	10,011
25	1.000	0.00	-3.96	5,440.0	6,800.0	8,160.0
30	0.8219	0.33	-3.85	4,452.9	5,589.2	6,725.5
35	0.6792	0.71	-3.75	3,662.0	4,618.3	5,574.7
40	0.5641	1.12	-3.65	3,025.4	3,835.7	4,646.0
45	0.4708	1.58	-3.55	2,510.7	3,201.5	3,892.4
50	0.3949	2.07	-3.46	2,092.5	2,685.0	3,277.4
55	0.3327	2.58	-3.37	1,751.4	2,262.2	2,773.1
60	0.2816	3.12	-3.28	1,471.9	1,914.6	2,357.3
65	0.2393	3.69	-3.20	1,242.0	1,627.4	2,012.9
70	0.2043	4.27	-3.12	1,052.0	1,389.1	1,726.3
75	0.1751	4.87	-3.04	894.4	1,190.5	1,486.6
80	0.1506	5.49	-2.96	763.3	1,024.3	1,285.4
85	0.1301	6.12	-2.89	653.6	884.7	1,115.8
90	0.1128	6.76	-2.82	561.7	766.9	972.1
95	0.0981	7.41	-2.75	484.3	667.1	850.0
100	0.0856	8.07	-2.68	418.9	582.4	745.9
105	0.0750	8.74	-2.61	363.5	510.1	656.7
110	0.0659	9.42	-2.55	316.3	448.2	580.0
115	0.0581	10.09	-2.49	276.2	395.0	513.9
120	0.0514	10.78	-2.43	241.8	349.2	456.7
125	0.0455	11.46	-2.37	212.2	309.7	407.1
130	0.0405	12.15	-2.32	186.8	275.4	363.9
135	0.0361	12.84	-2.26	164.9	245.5	326.1
140	0.0323	13.53	-2.21	145.9	219.5	293.1
145	0.0289	14.22	-2.16	129.4	196.7	264.1
150	0.0260	14.91	-2.11	115.1	176.8	238.5