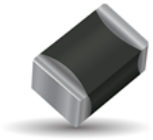
NB20R00684K--

(1206, 680 kOhm ±10%, 4400K, 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	1206
Operating temperature	-55°C to +150°C
Resistance	680 kOhm
Tolerance on Resistance (25°C)	±10%
B 25/85	4400K±3%
Maximum dissipation at 25°C	0.24 W
Thermal dissipation factor	4 mW/°C
Thermal time constant	7 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

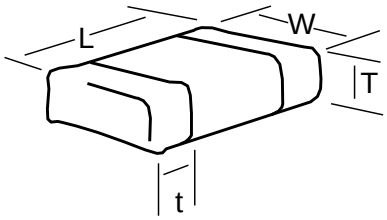
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions WWWW

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
1206	3.2±0.4	1.6±0.25	1.5 max	0.2 min
	(0.126±0.016)	(0.063±0.01)	(0.059) max	(0.008) min



How to Order (Packaging options)

NB	20	R0	0684	K	--
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	20 = 1206	See Datasheet	2 Sig. Digits + Number of Zeros	H = ±3%* J = ±5% K = ±10% M = ±20% * For selected PNs	BA = Plastic tape (180mm reel, 3,000 pcs/reel) BE = Plastic tape (180mm reel, 1,500 pcs/reel) BC = Plastic tape (330mm reel, 10,000 pcs/reel) -- = Bulk (5000 pcs/bag)

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

R0 (B25/85 = 4400K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4326 K	4382 K	4400 K	4423 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	113.9	25.89	-7.13	49,646,729	77,436,961	105,227,193
-50	79.71	22.37	-6.95	36,657,786	54,200,067	71,742,348
-45	56.30	19.23	-6.77	27,095,797	38,287,212	49,478,627
-40	40.13	16.44	-6.60	20,073,512	27,289,084	34,504,657
-35	28.85	13.96	-6.44	14,917,999	19,619,678	24,321,356
-30	20.92	11.77	-6.28	11,128,619	14,225,102	17,321,585
-25	15.29	9.82	-6.12	8,337,183	10,398,678	12,460,174
-20	11.27	8.11	-5.97	6,274,717	7,662,380	9,050,044
-15	8.368	6.60	-5.82	4,745,414	5,690,101	6,634,788
-10	6.261	5.28	-5.68	3,606,920	4,257,538	4,908,157
-5	4.719	4.13	-5.53	2,755,714	3,209,182	3,662,651
0	3.583	3.13	-5.40	2,116,416	2,436,381	2,756,346
5	2.739	2.27	-5.26	1,634,015	1,862,651	2,091,287
10	2.108	1.54	-5.13	1,268,252	1,433,757	1,599,262
15	1.634	0.93	-5.00	989,570	1,110,969	1,232,368
20	1.274	0.42	-4.88	776,189	866,437	956,685
25	1.000	0.00	-4.75	612,000	680,000	748,000
30	0.7897	0.40	-4.64	481,116	536,966	592,816
35	0.6273	0.86	-4.52	380,248	426,561	472,875
40	0.5012	1.36	-4.41	302,105	340,836	379,567
45	0.4028	1.91	-4.30	241,257	273,887	306,517
50	0.3255	2.50	-4.19	193,637	221,307	248,978
55	0.2644	3.13	-4.09	156,183	179,785	203,387
60	0.2159	3.78	-3.98	126,581	146,818	167,056
65	0.1772	4.47	-3.89	103,074	120,508	137,942
70	0.1462	5.18	-3.79	84,319	99,403	114,488
75	0.1212	5.90	-3.70	69,286	82,390	95,494
80	0.1009	6.65	-3.60	57,184	68,609	80,034
85	0.0844	7.42	-3.52	47,397	57,393	67,389
90	0.0709	8.20	-3.43	39,449	48,223	56,997
95	0.0598	8.99	-3.35	32,967	40,692	48,418
100	0.0507	9.79	-3.26	27,659	34,481	41,304
105	0.0431	10.60	-3.19	23,295	29,337	35,380
110	0.0369	11.41	-3.11	19,693	25,059	30,425
115	0.0316	12.24	-3.03	16,708	21,486	26,264
120	0.0272	13.06	-2.96	14,226	18,491	22,756
125	0.0235	13.89	-2.89	12,155	15,971	19,788
130	0.0204	14.73	-2.82	10,420	13,843	17,266
135	0.0177	15.56	-2.76	8,961.6	12,039	15,117
140	0.0154	16.40	-2.69	7,731.8	10,505	13,278
145	0.0135	17.23	-2.63	6,691.3	9,195.7	11,700
150	0.0119	18.07	-2.57	5,808.1	8,074.6	10,341