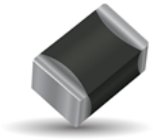
NB20R00684JBE

(1206, 680 kOhm ±5%, 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)	±5%
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

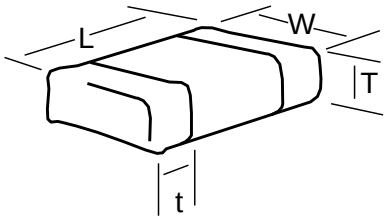
MSL 1
Pb Free 260°C

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	J	BE
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%	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)

* 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

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	53,518,577	77,436,961	101,355,345
-50	79.71	22.37	-6.95	39,367,790	54,200,067	69,032,344
-45	56.30	19.23	-6.77	29,010,157	38,287,212	47,564,267
-40	40.13	16.44	-6.60	21,437,966	27,289,084	33,140,202
-35	28.85	13.96	-6.44	15,898,983	19,619,678	23,340,372
-30	20.92	11.77	-6.28	11,839,874	14,225,102	16,610,329
-25	15.29	9.82	-6.12	8,857,117	10,398,678	11,940,240
-20	11.27	8.11	-5.97	6,657,836	7,662,380	8,666,925
-15	8.368	6.60	-5.82	5,029,919	5,690,101	6,350,283
-10	6.261	5.28	-5.68	3,819,797	4,257,538	4,695,280
-5	4.719	4.13	-5.53	2,916,173	3,209,182	3,502,191
0	3.583	3.13	-5.40	2,238,235	2,436,381	2,634,527
5	2.739	2.27	-5.26	1,727,147	1,862,651	1,998,154
10	2.108	1.54	-5.13	1,339,940	1,433,757	1,527,574
15	1.634	0.93	-5.00	1,045,118	1,110,969	1,176,820
20	1.274	0.42	-4.88	819,511	866,437	913,363
25	1.000	0.00	-4.75	646,000	680,000	714,000
30	0.7897	0.40	-4.64	507,964	536,966	565,968
35	0.6273	0.86	-4.52	401,576	426,561	451,547
40	0.5012	1.36	-4.41	319,147	340,836	362,525
45	0.4028	1.91	-4.30	254,952	273,887	292,823
50	0.3255	2.50	-4.19	204,702	221,307	237,913
55	0.2644	3.13	-4.09	165,172	179,785	194,398
60	0.2159	3.78	-3.98	133,922	146,818	159,715
65	0.1772	4.47	-3.89	109,099	120,508	131,917
70	0.1462	5.18	-3.79	89,289	99,403	109,518
75	0.1212	5.90	-3.70	73,406	82,390	91,374
80	0.1009	6.65	-3.60	60,614	68,609	76,603
85	0.0844	7.42	-3.52	50,266	57,393	64,519
90	0.0709	8.20	-3.43	41,860	48,223	54,586
95	0.0598	8.99	-3.35	35,001	40,692	46,384
100	0.0507	9.79	-3.26	29,383	34,481	39,580
105	0.0431	10.60	-3.19	24,761	29,337	33,913
110	0.0369	11.41	-3.11	20,946	25,059	29,172
115	0.0316	12.24	-3.03	17,783	21,486	25,189
120	0.0272	13.06	-2.96	15,151	18,491	21,831
125	0.0235	13.89	-2.89	12,954	15,971	18,989
130	0.0204	14.73	-2.82	11,112	13,843	16,574
135	0.0177	15.56	-2.76	9,563.6	12,039	14,515
140	0.0154	16.40	-2.69	8,257.1	10,505	12,753
145	0.0135	17.23	-2.63	7,151.1	9,195.7	11,240
150	0.0119	18.07	-2.57	6,211.9	8,074.6	9,937.4