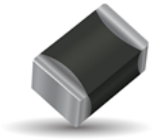
NB20R00105K--

(1206, 1 MOhm ±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	1 MOhm
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

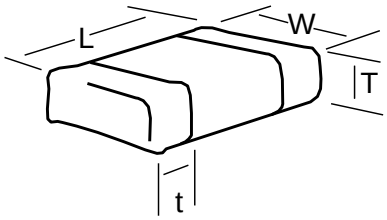
MSL 1
Pb Free 260°C

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	0105	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%	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	73,009,895	113,877,884	154,745,873
-50	79.71	22.37	-6.95	53,908,509	79,705,981	105,503,452
-45	56.30	19.23	-6.77	39,846,760	56,304,724	72,762,687
-40	40.13	16.44	-6.60	29,519,870	40,131,006	50,742,142
-35	28.85	13.96	-6.44	21,938,234	28,852,467	35,766,700
-30	20.92	11.77	-6.28	16,365,617	20,919,268	25,472,918
-25	15.29	9.82	-6.12	12,260,563	15,292,174	18,323,785
-20	11.27	8.11	-5.97	9,227,524	11,268,206	13,308,888
-15	8.368	6.60	-5.82	6,978,550	8,367,795	9,757,041
-10	6.261	5.28	-5.68	5,304,294	6,261,086	7,217,878
-5	4.719	4.13	-5.53	4,052,521	4,719,386	5,386,251
0	3.583	3.13	-5.40	3,112,377	3,582,914	4,053,451
5	2.739	2.27	-5.26	2,402,963	2,739,192	3,075,422
10	2.108	1.54	-5.13	1,865,076	2,108,466	2,351,856
15	1.634	0.93	-5.00	1,455,250	1,633,778	1,812,306
20	1.274	0.42	-4.88	1,141,455	1,274,172	1,406,890
25	1.000	0.00	-4.75	900,000	1,000,000	1,100,000
30	0.7897	0.40	-4.64	707,524	789,656	871,788
35	0.6273	0.86	-4.52	559,188	627,296	695,405
40	0.5012	1.36	-4.41	444,272	501,229	558,187
45	0.4028	1.91	-4.30	354,790	402,776	450,761
50	0.3255	2.50	-4.19	284,760	325,452	366,144
55	0.2644	3.13	-4.09	229,680	264,389	299,098
60	0.2159	3.78	-3.98	186,149	215,909	245,670
65	0.1772	4.47	-3.89	151,579	177,218	202,857
70	0.1462	5.18	-3.79	123,998	146,181	168,365
75	0.1212	5.90	-3.70	101,892	121,162	140,432
80	0.1009	6.65	-3.60	84,094	100,895	117,696
85	0.0844	7.42	-3.52	69,701	84,401	99,101
90	0.0709	8.20	-3.43	58,013	70,916	83,819
95	0.0598	8.99	-3.35	48,480	59,842	71,203
100	0.0507	9.79	-3.26	40,674	50,708	60,742
105	0.0431	10.60	-3.19	34,257	43,143	52,029
110	0.0369	11.41	-3.11	28,960	36,851	44,742
115	0.0316	12.24	-3.03	24,571	31,597	38,623
120	0.0272	13.06	-2.96	20,921	27,193	33,465
125	0.0235	13.89	-2.89	17,875	23,487	29,099
130	0.0204	14.73	-2.82	15,323	20,357	25,392
135	0.0177	15.56	-2.76	13,179	17,705	22,231
140	0.0154	16.40	-2.69	11,370	15,449	19,527
145	0.0135	17.23	-2.63	9,840.2	13,523	17,206
150	0.0119	18.07	-2.57	8,541.4	11,874	15,208