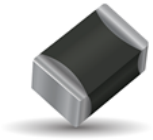
NB20R00824MBE

(1206, 820 kOhm ±20%, 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	820 kOhm
Tolerance on Resistance (25°C)	±20%
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

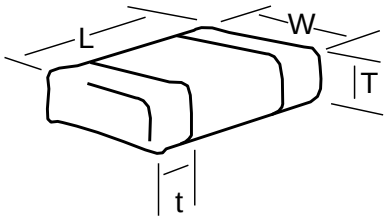
MSL 1
Pb Free
260°C

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	0824	M	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% * 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	50,530,127	93,379,865	136,229,602
-50	79.71	22.37	-6.95	37,669,087	65,358,904	93,048,721
-45	56.30	19.23	-6.77	28,057,356	46,169,873	64,282,391
-40	40.13	16.44	-6.60	20,915,551	32,907,425	44,899,299
-35	28.85	13.96	-6.44	15,623,450	23,659,023	31,694,596
-30	20.92	11.77	-6.28	11,704,426	17,153,799	22,603,173
-25	15.29	9.82	-6.12	8,799,704	12,539,583	16,279,462
-20	11.27	8.11	-5.97	6,642,577	9,239,929	11,837,281
-15	8.368	6.60	-5.82	5,036,252	6,861,592	8,686,933
-10	6.261	5.28	-5.68	3,836,112	5,134,090	6,432,069
-5	4.719	4.13	-5.53	2,936,077	3,869,896	4,803,715
0	3.583	3.13	-5.40	2,258,350	2,937,989	3,617,628
5	2.739	2.27	-5.26	1,745,816	2,246,138	2,746,460
10	2.108	1.54	-5.13	1,356,468	1,728,942	2,101,416
15	1.634	0.93	-5.00	1,059,335	1,339,698	1,620,061
20	1.274	0.42	-4.88	831,511	1,044,821	1,258,132
25	1.000	0.00	-4.75	656,000	820,000	984,000
30	0.7897	0.40	-4.64	515,417	647,518	779,618
35	0.6273	0.86	-4.52	407,096	514,383	621,670
40	0.5012	1.36	-4.41	323,203	411,008	498,814
45	0.4028	1.91	-4.30	257,900	330,276	402,652
50	0.3255	2.50	-4.19	206,816	266,871	326,925
55	0.2644	3.13	-4.09	166,658	216,799	266,941
60	0.2159	3.78	-3.98	134,937	177,046	219,154
65	0.1772	4.47	-3.89	109,763	145,319	180,874
70	0.1462	5.18	-3.79	89,692	119,869	150,046
75	0.1212	5.90	-3.70	73,616	99,353	125,089
80	0.1009	6.65	-3.60	60,683	82,734	104,784
85	0.0844	7.42	-3.52	50,234	69,209	88,184
90	0.0709	8.20	-3.43	41,755	58,151	74,547
95	0.0598	8.99	-3.35	34,847	49,070	63,294
100	0.0507	9.79	-3.26	29,195	41,581	53,966
105	0.0431	10.60	-3.19	24,553	35,377	46,201
110	0.0369	11.41	-3.11	20,725	30,218	39,710
115	0.0316	12.24	-3.03	17,557	25,910	34,262
120	0.0272	13.06	-2.96	14,926	22,298	29,671
125	0.0235	13.89	-2.89	12,731	19,259	25,787
130	0.0204	14.73	-2.82	10,896	16,693	22,490
135	0.0177	15.56	-2.76	9,354.9	14,518	19,681
140	0.0154	16.40	-2.69	8,056.9	12,668	17,279
145	0.0135	17.23	-2.63	6,960.0	11,089	15,218
150	0.0119	18.07	-2.57	6,030.2	9,737.1	13,444