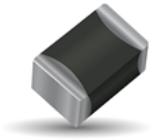
NB20Q00394MBC

(1206, 390 kOhm ±20%, 4300K, 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	390 kOhm
Tolerance on Resistance (25°C)	±20%
B 25/85	4300K±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

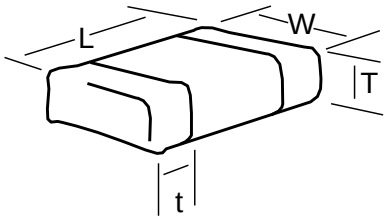
MSL 1
Pb Free
260°C

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 — **Type**
NB = Ni/Sn Term for lead free soldering

20 — **Size**
20 = 1206

Q0 — **Material Code**
See Datasheet

0394 — **Resistance (Ohm)**
2 Sig. Digits + Number of Zeros

M — **Tolerance**
H = ±3%*
J = ±5%
K = ±10%
M = ±20%

* For selected PNs

BC — **Suffix: Packaging**
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

Q0 (B25/85 = 4300K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4221 K	4281 K	4300 K	4325 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	98.04	25.30	-6.87	20,915,358	38,236,781	55,558,204
-50	69.53	21.86	-6.70	15,765,140	27,115,139	38,465,138
-45	49.73	18.79	-6.53	11,870,908	19,395,014	26,919,120
-40	35.87	16.07	-6.37	8,943,745	13,989,543	19,035,340
-35	26.08	13.65	-6.22	6,750,019	10,172,952	13,595,885
-30	19.12	11.50	-6.07	5,107,486	7,456,275	9,805,065
-25	14.12	9.60	-5.92	3,877,012	5,507,258	7,137,504
-20	10.51	7.93	-5.78	2,953,773	4,098,260	5,242,746
-15	7.877	6.45	-5.64	2,259,425	3,072,065	3,884,704
-10	5.947	5.16	-5.50	1,735,688	2,319,253	2,902,818
-5	4.521	4.04	-5.37	1,339,307	1,763,096	2,186,885
0	3.460	3.06	-5.24	1,038,203	1,349,398	1,660,592
5	2.666	2.22	-5.11	808,572	1,039,605	1,270,638
10	2.067	1.51	-4.99	632,725	806,106	979,487
15	1.613	0.91	-4.87	497,491	628,989	760,487
20	1.266	0.41	-4.75	393,036	493,805	594,573
25	1.000	0.00	-4.63	312,000	390,000	468,000
30	0.7944	0.39	-4.52	246,641	309,819	372,997
35	0.6347	0.84	-4.41	195,947	247,527	299,106
40	0.5099	1.33	-4.30	156,438	198,860	241,281
45	0.4119	1.87	-4.20	125,498	160,628	195,758
50	0.3344	2.45	-4.09	101,156	130,433	159,711
55	0.2730	3.06	-3.99	81,914	106,461	131,007
60	0.2239	3.70	-3.90	66,635	87,330	108,026
65	0.1846	4.37	-3.80	54,448	71,988	89,529
70	0.1529	5.06	-3.71	44,684	59,625	74,565
75	0.1272	5.77	-3.62	36,828	49,613	62,399
80	0.1063	6.50	-3.53	30,479	41,469	52,459
85	0.0893	7.25	-3.44	25,328	34,815	44,301
90	0.0753	8.01	-3.36	21,131	29,353	37,575
95	0.0637	8.78	-3.28	17,698	24,851	32,004
100	0.0542	9.57	-3.20	14,879	21,125	27,370
105	0.0462	10.36	-3.13	12,555	18,028	23,500
110	0.0396	11.15	-3.05	10,632	15,444	20,255
115	0.0340	11.96	-2.98	9,035.3	13,279	17,523
120	0.0294	12.77	-2.91	7,704.3	11,459	15,214
125	0.0254	13.58	-2.84	6,591.3	9,923.6	13,256
130	0.0221	14.39	-2.77	5,657.2	8,623.0	11,589
135	0.0193	15.21	-2.71	4,870.7	7,517.7	10,165
140	0.0169	16.03	-2.64	4,206.3	6,575.2	8,944.0
145	0.0148	16.84	-2.58	3,643.4	5,768.8	7,894.3
150	0.0130	17.66	-2.52	3,164.8	5,076.7	6,988.6