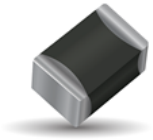
NB20M00273HBE

(1206, 27 kOhm ±3%, 3950K, 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	27 kOhm
Tolerance on Resistance (25°C)	±3%
B 25/85	3950K±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

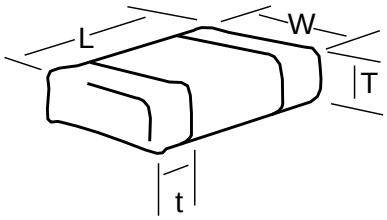
MSL 1
Pb Free 260°C

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	M0	0273	H	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

M0 (B25/85 = 3950K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3925 K	3944 K	3950 K	3958 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	99.59	15.64	-7.42	2,187,777	2,688,936	3,190,094
-50	68.97	14.25	-7.16	1,541,049	1,862,309	2,183,570
-45	48.40	12.94	-6.91	1,098,409	1,306,668	1,514,927
-40	34.38	11.69	-6.67	791,840	928,242	1,064,644
-35	24.71	10.51	-6.45	577,080	667,260	757,440
-30	17.97	9.39	-6.23	424,978	485,105	545,231
-25	13.20	8.33	-6.02	316,114	356,503	396,891
-20	9.804	7.31	-5.82	237,405	264,710	292,014
-15	7.352	6.35	-5.63	179,943	198,500	217,056
-10	5.565	5.43	-5.45	137,600	150,261	162,922
-5	4.251	4.55	-5.28	106,116	114,776	123,437
0	3.275	3.70	-5.11	82,504	88,432	94,360
5	2.544	2.90	-4.95	64,648	68,700	72,753
10	1.992	2.13	-4.80	51,037	53,796	56,554
15	1.572	1.39	-4.65	40,583	42,446	44,309
20	1.249	0.68	-4.51	32,494	33,735	34,977
25	1.000	0.00	-4.38	26,190	27,000	27,810
30	0.8057	0.66	-4.25	20,959	21,754	22,550
35	0.6534	1.30	-4.12	16,883	17,641	18,399
40	0.5331	1.92	-4.00	13,685	14,394	15,102
45	0.4376	2.53	-3.89	11,161	11,814	12,467
50	0.3612	3.12	-3.77	9,154.8	9,751.8	10,349
55	0.2998	3.70	-3.67	7,551.4	8,093.7	8,635.9
60	0.2501	4.26	-3.57	6,262.4	6,752.9	7,243.3
65	0.2097	4.81	-3.47	5,220.3	5,662.7	6,105.0
70	0.1767	5.35	-3.37	4,373.3	4,771.6	5,169.9
75	0.1496	5.87	-3.28	3,681.2	4,039.6	4,397.9
80	0.1272	6.38	-3.19	3,113.0	3,435.2	3,757.5
85	0.1087	6.88	-3.11	2,644.1	2,934.0	3,223.9
90	0.0932	7.37	-3.03	2,255.5	2,516.4	2,777.2
95	0.0803	7.84	-2.95	1,931.9	2,166.9	2,401.8
100	0.0694	8.31	-2.87	1,661.3	1,873.1	2,084.9
105	0.0602	8.76	-2.80	1,434.1	1,625.3	1,816.4
110	0.0524	9.21	-2.73	1,242.5	1,415.3	1,588.0
115	0.0458	9.64	-2.66	1,080.4	1,236.7	1,393.0
120	0.0402	10.07	-2.60	942.6	1,084.3	1,226.0
125	0.0353	10.48	-2.53	825.2	953.7	1,082.3
130	0.0312	10.89	-2.47	724.7	841.5	958.4
135	0.0276	11.29	-2.41	638.4	744.8	851.2
140	0.0245	11.68	-2.36	564.0	661.0	758.1
145	0.0218	12.06	-2.30	499.8	588.4	677.0
150	0.0194	12.43	-2.25	444.1	525.1	606.2