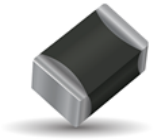
NB20M00273K--

(1206, 27 kOhm ±10%, 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)	±10%
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

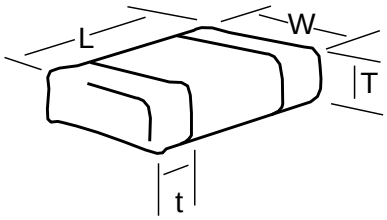
MSL 1
Pb Free 260°C

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	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

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	1,999,551	2,688,936	3,378,320
-50	68.97	14.25	-7.16	1,410,687	1,862,309	2,313,932
-45	48.40	12.94	-6.91	1,006,942	1,306,668	1,606,393
-40	34.38	11.69	-6.67	726,863	928,242	1,129,621
-35	24.71	10.51	-6.45	530,372	667,260	804,148
-30	17.97	9.39	-6.23	391,021	485,105	579,188
-25	13.20	8.33	-6.02	291,159	356,503	421,846
-20	9.804	7.31	-5.82	218,876	264,710	310,544
-15	7.352	6.35	-5.63	166,048	198,500	230,951
-10	5.565	5.43	-5.45	127,082	150,261	173,440
-5	4.251	4.55	-5.28	98,081	114,776	131,471
0	3.275	3.70	-5.11	76,313	88,432	100,551
5	2.544	2.90	-4.95	59,839	68,700	77,562
10	1.992	2.13	-4.80	47,272	53,796	60,320
15	1.572	1.39	-4.65	37,612	42,446	47,280
20	1.249	0.68	-4.51	30,132	33,735	37,338
25	1.000	0.00	-4.38	24,300	27,000	29,700
30	0.8057	0.66	-4.25	19,436	21,754	24,073
35	0.6534	1.30	-4.12	15,648	17,641	19,634
40	0.5331	1.92	-4.00	12,678	14,394	16,110
45	0.4376	2.53	-3.89	10,334	11,814	13,294
50	0.3612	3.12	-3.77	8,472.1	9,751.8	11,031
55	0.2998	3.70	-3.67	6,984.9	8,093.7	9,202.5
60	0.2501	4.26	-3.57	5,789.7	6,752.9	7,716.0
65	0.2097	4.81	-3.47	4,823.9	5,662.7	6,501.4
70	0.1767	5.35	-3.37	4,039.3	4,771.6	5,503.9
75	0.1496	5.87	-3.28	3,398.4	4,039.6	4,680.7
80	0.1272	6.38	-3.19	2,872.5	3,435.2	3,998.0
85	0.1087	6.88	-3.11	2,438.7	2,934.0	3,429.3
90	0.0932	7.37	-3.03	2,079.3	2,516.4	2,953.4
95	0.0803	7.84	-2.95	1,780.2	2,166.9	2,553.5
100	0.0694	8.31	-2.87	1,530.2	1,873.1	2,216.0
105	0.0602	8.76	-2.80	1,320.3	1,625.3	1,930.2
110	0.0524	9.21	-2.73	1,143.5	1,415.3	1,687.1
115	0.0458	9.64	-2.66	993.8	1,236.7	1,479.6
120	0.0402	10.07	-2.60	866.7	1,084.3	1,301.9
125	0.0353	10.48	-2.53	758.4	953.7	1,149.1
130	0.0312	10.89	-2.47	665.8	841.5	1,017.3
135	0.0276	11.29	-2.41	586.2	744.8	903.3
140	0.0245	11.68	-2.36	517.8	661.0	804.3
145	0.0218	12.06	-2.30	458.6	588.4	718.2
150	0.0194	12.43	-2.25	407.4	525.1	642.9