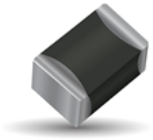
NB12M00273JBD

(0805, 27 kOhm ±5%, 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	0805
Operating temperature	-55°C to +150°C
Resistance	27 kOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	3950K±3%
Maximum dissipation at 25°C	0.12 W
Thermal dissipation factor	2 mW/°C
Thermal time constant	5 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

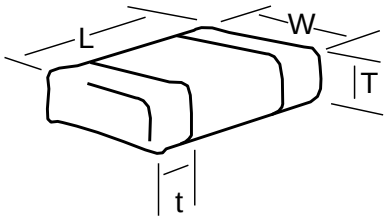
MSL 1
Pb Free 260°C

AEC-Q200 based qualification

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0805	2.0±0.3	1.25±0.2	1.3 max	0.2 min
	(0.079±0.012)	(0.049±0.008)	(0.051) max	(0.008) min



How to Order (Packaging options)

NB	12	M0	0273	J	BD
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	12 = 0805	See Datasheet	2 Sig. Digits + Number of Zeros	H = ±3%* J = ±5% K = ±10% M = ±20%	BB = Cardboard tape (180mm reel, 4,000 pcs/reel) BF = Cardboard tape (180mm reel, 2,000 pcs/reel) BD = Cardboard 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	2,133,998	2,688,936	3,243,873
-50	68.97	14.25	-7.16	1,503,803	1,862,309	2,220,816
-45	48.40	12.94	-6.91	1,072,276	1,306,668	1,541,060
-40	34.38	11.69	-6.67	773,275	928,242	1,083,209
-35	24.71	10.51	-6.45	563,735	667,260	770,785
-30	17.97	9.39	-6.23	415,276	485,105	554,933
-25	13.20	8.33	-6.02	308,984	356,503	404,021
-20	9.804	7.31	-5.82	232,111	264,710	297,308
-15	7.352	6.35	-5.63	175,973	198,500	221,026
-10	5.565	5.43	-5.45	134,595	150,261	165,927
-5	4.251	4.55	-5.28	103,820	114,776	125,732
0	3.275	3.70	-5.11	80,735	88,432	96,129
5	2.544	2.90	-4.95	63,274	68,700	74,127
10	1.992	2.13	-4.80	49,962	53,796	57,630
15	1.572	1.39	-4.65	39,734	42,446	45,158
20	1.249	0.68	-4.51	31,819	33,735	35,652
25	1.000	0.00	-4.38	25,650	27,000	28,350
30	0.8057	0.66	-4.25	20,524	21,754	22,985
35	0.6534	1.30	-4.12	16,530	17,641	18,752
40	0.5331	1.92	-4.00	13,397	14,394	15,390
45	0.4376	2.53	-3.89	10,924	11,814	12,703
50	0.3612	3.12	-3.77	8,959.7	9,751.8	10,544
55	0.2998	3.70	-3.67	7,389.6	8,093.7	8,797.8
60	0.2501	4.26	-3.57	6,127.4	6,752.9	7,378.4
65	0.2097	4.81	-3.47	5,107.0	5,662.7	6,218.3
70	0.1767	5.35	-3.37	4,277.8	4,771.6	5,265.4
75	0.1496	5.87	-3.28	3,600.4	4,039.6	4,478.7
80	0.1272	6.38	-3.19	3,044.3	3,435.2	3,826.2
85	0.1087	6.88	-3.11	2,585.4	2,934.0	3,282.6
90	0.0932	7.37	-3.03	2,205.2	2,516.4	2,827.6
95	0.0803	7.84	-2.95	1,888.6	2,166.9	2,445.1
100	0.0694	8.31	-2.87	1,623.9	1,873.1	2,122.4
105	0.0602	8.76	-2.80	1,401.6	1,625.3	1,848.9
110	0.0524	9.21	-2.73	1,214.2	1,415.3	1,616.3
115	0.0458	9.64	-2.66	1,055.6	1,236.7	1,417.8
120	0.0402	10.07	-2.60	920.9	1,084.3	1,247.6
125	0.0353	10.48	-2.53	806.1	953.7	1,101.4
130	0.0312	10.89	-2.47	707.8	841.5	975.2
135	0.0276	11.29	-2.41	623.5	744.8	866.0
140	0.0245	11.68	-2.36	550.8	661.0	771.3
145	0.0218	12.06	-2.30	488.0	588.4	688.7
150	0.0194	12.43	-2.25	433.6	525.1	616.7