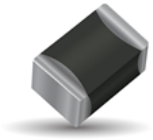
NB12M00183H--

(0805, 18 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	0805
Operating temperature	-55°C to +150°C
Resistance	18 kOhm
Tolerance on Resistance (25°C)	±3%
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

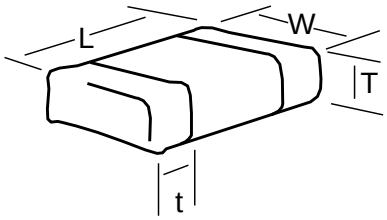
MSL 1
Pb Free
260°C

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	0183	H	--
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	1,458,518	1,792,624	2,126,729
-50	68.97	14.25	-7.16	1,027,366	1,241,540	1,455,713
-45	48.40	12.94	-6.91	732,273	871,112	1,009,951
-40	34.38	11.69	-6.67	527,893	618,828	709,763
-35	24.71	10.51	-6.45	384,720	444,840	504,960
-30	17.97	9.39	-6.23	283,319	323,403	363,487
-25	13.20	8.33	-6.02	210,743	237,668	264,594
-20	9.804	7.31	-5.82	158,270	176,473	194,676
-15	7.352	6.35	-5.63	119,962	132,333	144,704
-10	5.565	5.43	-5.45	91,733	100,174	108,615
-5	4.251	4.55	-5.28	70,744	76,517	82,291
0	3.275	3.70	-5.11	55,002	58,955	62,907
5	2.544	2.90	-4.95	43,099	45,800	48,502
10	1.992	2.13	-4.80	34,025	35,864	37,703
15	1.572	1.39	-4.65	27,055	28,297	29,539
20	1.249	0.68	-4.51	21,663	22,490	23,318
25	1.000	0.00	-4.38	17,460	18,000	18,540
30	0.8057	0.66	-4.25	13,973	14,503	15,033
35	0.6534	1.30	-4.12	11,255	11,761	12,266
40	0.5331	1.92	-4.00	9,123.5	9,595.8	10,068
45	0.4376	2.53	-3.89	7,440.4	7,875.9	8,311.5
50	0.3612	3.12	-3.77	6,103.2	6,501.2	6,899.2
55	0.2998	3.70	-3.67	5,034.3	5,395.8	5,757.3
60	0.2501	4.26	-3.57	4,174.9	4,501.9	4,828.9
65	0.2097	4.81	-3.47	3,480.2	3,775.1	4,070.0
70	0.1767	5.35	-3.37	2,915.5	3,181.1	3,446.6
75	0.1496	5.87	-3.28	2,454.1	2,693.0	2,931.9
80	0.1272	6.38	-3.19	2,075.3	2,290.2	2,505.0
85	0.1087	6.88	-3.11	1,762.7	1,956.0	2,149.3
90	0.0932	7.37	-3.03	1,503.7	1,677.6	1,851.5
95	0.0803	7.84	-2.95	1,287.9	1,444.6	1,601.2
100	0.0694	8.31	-2.87	1,107.5	1,248.7	1,390.0
105	0.0602	8.76	-2.80	956.1	1,083.5	1,210.9
110	0.0524	9.21	-2.73	828.4	943.5	1,058.7
115	0.0458	9.64	-2.66	720.3	824.5	928.7
120	0.0402	10.07	-2.60	628.4	722.9	817.3
125	0.0353	10.48	-2.53	550.1	635.8	721.5
130	0.0312	10.89	-2.47	483.1	561.0	638.9
135	0.0276	11.29	-2.41	425.6	496.5	567.4
140	0.0245	11.68	-2.36	376.0	440.7	505.4
145	0.0218	12.06	-2.30	333.2	392.3	451.3
150	0.0194	12.43	-2.25	296.1	350.1	404.1