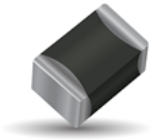
NB21M00473HBB

(0603, 47 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	0603
Operating temperature	-55°C to +150°C
Resistance	47 kOhm
Tolerance on Resistance (25°C)	±3%
B 25/85	3950K±3%
Maximum dissipation at 25°C	0.07 W
Thermal dissipation factor	1 mW/°C
Thermal time constant	4 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

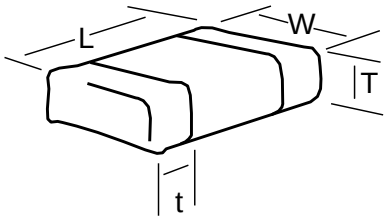
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0603	1.6±0.2	0.8±0.2	1.0 max	0.2 min
	(0.063±0.008)	(0.031±0.008)	(0.039) max	(0.008) min



How to Order (Packaging options)

NB	21	M0	0473	H	BB
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	21 = 0603	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	3,808,353	4,680,740	5,553,127
-50	68.97	14.25	-7.16	2,682,566	3,241,798	3,801,029
-45	48.40	12.94	-6.91	1,912,045	2,274,570	2,637,094
-40	34.38	11.69	-6.67	1,378,388	1,615,829	1,853,269
-35	24.71	10.51	-6.45	1,004,547	1,161,527	1,318,507
-30	17.97	9.39	-6.23	739,777	844,441	949,106
-25	13.20	8.33	-6.02	550,273	620,579	690,884
-20	9.804	7.31	-5.82	413,261	460,791	508,320
-15	7.352	6.35	-5.63	313,235	345,536	377,838
-10	5.565	5.43	-5.45	239,526	261,565	283,605
-5	4.251	4.55	-5.28	184,720	199,796	214,871
0	3.275	3.70	-5.11	143,617	153,937	164,257
5	2.544	2.90	-4.95	112,535	119,590	126,644
10	1.992	2.13	-4.80	88,843	93,645	98,447
15	1.572	1.39	-4.65	70,645	73,888	77,130
20	1.249	0.68	-4.51	56,563	58,725	60,886
25	1.000	0.00	-4.38	45,590	47,000	48,410
30	0.8057	0.66	-4.25	36,484	37,869	39,254
35	0.6534	1.30	-4.12	29,388	30,708	32,028
40	0.5331	1.92	-4.00	23,823	25,056	26,289
45	0.4376	2.53	-3.89	19,428	20,565	21,702
50	0.3612	3.12	-3.77	15,936	16,975	18,015
55	0.2998	3.70	-3.67	13,145	14,089	15,033
60	0.2501	4.26	-3.57	10,901	11,755	12,609
65	0.2097	4.81	-3.47	9,087	9,857	10,627
70	0.1767	5.35	-3.37	7,613	8,306	9,000
75	0.1496	5.87	-3.28	6,408	7,032	7,656
80	0.1272	6.38	-3.19	5,419	5,980	6,541
85	0.1087	6.88	-3.11	4,603	5,107	5,612
90	0.0932	7.37	-3.03	3,926	4,380	4,834
95	0.0803	7.84	-2.95	3,363	3,772	4,181
100	0.0694	8.31	-2.87	2,892	3,261	3,629
105	0.0602	8.76	-2.80	2,496	2,829	3,162
110	0.0524	9.21	-2.73	2,163	2,464	2,764
115	0.0458	9.64	-2.66	1,881	2,153	2,425
120	0.0402	10.07	-2.60	1,641	1,887	2,134
125	0.0353	10.48	-2.53	1,436	1,660	1,884
130	0.0312	10.89	-2.47	1,261	1,465	1,668
135	0.0276	11.29	-2.41	1,111	1,296	1,482
140	0.0245	11.68	-2.36	981.8	1,151	1,320
145	0.0218	12.06	-2.30	870.0	1,024	1,178
150	0.0194	12.43	-2.25	773.1	914.1	1,055