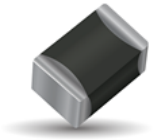
NB21M00473KBF

(0603, 47 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	0603
Operating temperature	-55°C to +150°C
Resistance	47 kOhm
Tolerance on Resistance (25°C)	±10%
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

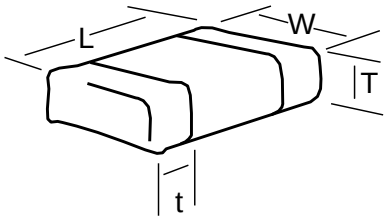
MSL 1
Pb Free
260°C

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	K	BF
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	3,480,701	4,680,740	5,880,779
-50	68.97	14.25	-7.16	2,455,641	3,241,798	4,027,955
-45	48.40	12.94	-6.91	1,752,825	2,274,570	2,796,314
-40	34.38	11.69	-6.67	1,265,280	1,615,829	1,966,377
-35	24.71	10.51	-6.45	923,240	1,161,527	1,399,814
-30	17.97	9.39	-6.23	680,666	844,441	1,008,217
-25	13.20	8.33	-6.02	506,832	620,579	734,325
-20	9.804	7.31	-5.82	381,006	460,791	540,576
-15	7.352	6.35	-5.63	289,047	345,536	402,025
-10	5.565	5.43	-5.45	221,216	261,565	301,914
-5	4.251	4.55	-5.28	170,734	199,796	228,857
0	3.275	3.70	-5.11	132,842	153,937	175,032
5	2.544	2.90	-4.95	104,164	119,590	135,015
10	1.992	2.13	-4.80	82,288	93,645	105,002
15	1.572	1.39	-4.65	65,473	73,888	82,303
20	1.249	0.68	-4.51	52,453	58,725	64,996
25	1.000	0.00	-4.38	42,300	47,000	51,700
30	0.8057	0.66	-4.25	33,833	37,869	41,905
35	0.6534	1.30	-4.12	27,239	30,708	34,178
40	0.5331	1.92	-4.00	22,069	25,056	28,043
45	0.4376	2.53	-3.89	17,988	20,565	23,142
50	0.3612	3.12	-3.77	14,748	16,975	19,203
55	0.2998	3.70	-3.67	12,159	14,089	16,019
60	0.2501	4.26	-3.57	10,078	11,755	13,432
65	0.2097	4.81	-3.47	8,397	9,857	11,317
70	0.1767	5.35	-3.37	7,031	8,306	9,581
75	0.1496	5.87	-3.28	5,916	7,032	8,148
80	0.1272	6.38	-3.19	5,000	5,980	6,959
85	0.1087	6.88	-3.11	4,245	5,107	5,969
90	0.0932	7.37	-3.03	3,620	4,380	5,141
95	0.0803	7.84	-2.95	3,099	3,772	4,445
100	0.0694	8.31	-2.87	2,664	3,261	3,858
105	0.0602	8.76	-2.80	2,298	2,829	3,360
110	0.0524	9.21	-2.73	1,990	2,464	2,937
115	0.0458	9.64	-2.66	1,730	2,153	2,576
120	0.0402	10.07	-2.60	1,509	1,887	2,266
125	0.0353	10.48	-2.53	1,320	1,660	2,000
130	0.0312	10.89	-2.47	1,159	1,465	1,771
135	0.0276	11.29	-2.41	1,020	1,296	1,572
140	0.0245	11.68	-2.36	901.3	1,151	1,400
145	0.0218	12.06	-2.30	798.3	1,024	1,250
150	0.0194	12.43	-2.25	709.1	914.1	1,119