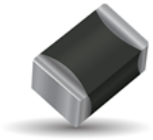
NB20M00473KBC

(1206, 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	1206
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	0.24 W
Thermal dissipation factor	4 mW/°C
Thermal time constant	7 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

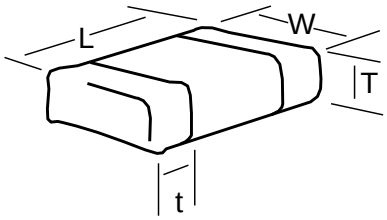
MSL 1
Pb Free
260°C

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	0473	K	BC
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% * For selected PNs	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)

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	8,397.2	9,857.2	11,317
70	0.1767	5.35	-3.37	7,031.3	8,306.1	9,580.9
75	0.1496	5.87	-3.28	5,915.8	7,031.8	8,147.9
80	0.1272	6.38	-3.19	5,000.3	5,979.9	6,959.5
85	0.1087	6.88	-3.11	4,245.2	5,107.3	5,969.5
90	0.0932	7.37	-3.03	3,619.6	4,380.3	5,141.1
95	0.0803	7.84	-2.95	3,098.9	3,771.9	4,444.9
100	0.0694	8.31	-2.87	2,663.7	3,260.6	3,857.6
105	0.0602	8.76	-2.80	2,298.3	2,829.2	3,360.0
110	0.0524	9.21	-2.73	1,990.5	2,463.6	2,936.8
115	0.0458	9.64	-2.66	1,730.0	2,152.8	2,575.6
120	0.0402	10.07	-2.60	1,508.7	1,887.5	2,266.2
125	0.0353	10.48	-2.53	1,320.2	1,660.2	2,000.2
130	0.0312	10.89	-2.47	1,158.9	1,464.9	1,770.9
135	0.0276	11.29	-2.41	1,020.5	1,296.4	1,572.4
140	0.0245	11.68	-2.36	901.3	1,150.7	1,400.1
145	0.0218	12.06	-2.30	798.3	1,024.2	1,250.1
150	0.0194	12.43	-2.25	709.1	914.1	1,119.2