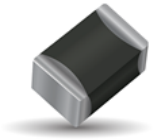
NB12N00473HBD

(0805, 47 kOhm ±3%, 4080K, 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	47 kOhm
Tolerance on Resistance (25°C)	±3%
B 25/85	4080K±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

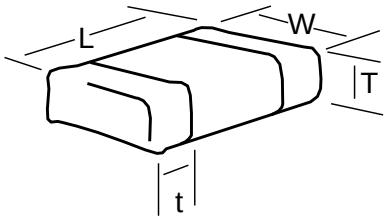
MSL 1
Pb Free
260°C

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	N0	0473	H	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

N0 (B25/85 = 4080K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4049 K	4072 K	4080 K	4090 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	110.1	24.01	-7.50	3,777,101	5,174,575	6,572,049
-50	75.89	20.74	-7.25	2,720,017	3,566,800	4,413,583
-45	52.97	17.83	-7.01	1,971,028	2,489,705	3,008,383
-40	37.42	15.25	-6.78	1,437,984	1,758,929	2,079,875
-35	26.75	12.95	-6.56	1,056,572	1,257,067	1,457,563
-30	19.33	10.91	-6.35	782,001	908,381	1,034,761
-25	14.11	9.11	-6.14	583,059	663,401	743,744
-20	10.41	7.52	-5.95	437,941	489,434	540,926
-15	7.758	6.12	-5.76	331,356	364,619	397,881
-10	5.834	4.90	-5.58	252,528	274,182	295,837
-5	4.426	3.83	-5.41	193,823	208,032	222,241
0	3.387	2.91	-5.24	149,804	159,205	168,606
5	2.614	2.11	-5.08	116,571	122,848	129,124
10	2.033	1.43	-4.93	91,313	95,547	99,781
15	1.593	0.86	-4.78	71,992	74,882	77,772
20	1.258	0.39	-4.64	57,115	59,117	61,118
25	1.000	0.00	-4.51	45,590	47,000	48,410
30	0.8004	0.37	-4.37	36,351	37,620	38,888
35	0.6449	0.80	-4.25	29,158	30,308	31,458
40	0.5228	1.26	-4.13	23,522	24,570	25,618
45	0.4264	1.77	-4.01	19,082	20,039	20,995
50	0.3497	2.32	-3.90	15,563	16,438	17,312
55	0.2885	2.90	-3.79	12,759	13,559	14,359
60	0.2392	3.51	-3.68	10,512	11,244	11,976
65	0.1994	4.14	-3.58	8,703.6	9,373.0	10,043
70	0.1671	4.80	-3.49	7,239.7	7,852.1	8,464.5
75	0.1406	5.48	-3.39	6,049.3	6,609.4	7,169.6
80	0.1189	6.17	-3.30	5,076.7	5,589.2	6,101.6
85	0.1010	6.88	-3.22	4,278.5	4,747.4	5,216.4
90	0.0862	7.60	-3.13	3,620.5	4,049.7	4,479.0
95	0.0738	8.33	-3.05	3,075.8	3,468.9	3,862.0
100	0.0635	9.08	-2.97	2,623.0	2,983.2	3,343.5
105	0.0548	9.83	-2.90	2,245.1	2,575.4	2,905.7
110	0.0475	10.58	-2.83	1,928.5	2,231.6	2,534.8
115	0.0413	11.35	-2.76	1,662.2	1,940.6	2,219.1
120	0.0360	12.11	-2.69	1,437.5	1,693.5	1,949.4
125	0.0315	12.89	-2.62	1,247.2	1,482.7	1,718.2
130	0.0277	13.66	-2.56	1,085.4	1,302.4	1,519.3
135	0.0244	14.43	-2.50	947.5	1,147.5	1,347.6
140	0.0216	15.21	-2.44	829.5	1,014.2	1,198.8
145	0.0191	15.98	-2.38	728.3	898.9	1,069.6
150	0.0170	16.76	-2.33	641.2	799.0	956.9