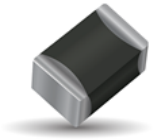
NB12N00563KBF

(0805, 56 kOhm ±10%, 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	56 kOhm
Tolerance on Resistance (25°C)	±10%
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

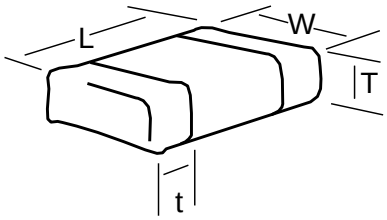
MSL 1
Pb Free
260°C

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 — **Type**
NB = Ni/Sn Term for lead free soldering

12 — **Size**
12 = 0805

N0 — **Material Code**
See Datasheet

0563 — **Resistance (Ohm)**
2 Sig. Digits + Number of Zeros

K — **Tolerance**
H = ±3%*
J = ±5%
K = ±10%
M = ±20%

* For selected PNs

BF — **Suffix: Packaging**
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)

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	4,068,794	6,165,451	8,262,109
-50	75.89	20.74	-7.25	2,943,385	4,249,804	5,556,223
-45	52.97	17.83	-7.01	2,140,806	2,966,457	3,792,108
-40	37.42	15.25	-6.78	1,566,641	2,095,746	2,624,851
-35	26.75	12.95	-6.56	1,154,049	1,497,782	1,841,515
-30	19.33	10.91	-6.35	855,982	1,082,326	1,308,669
-25	14.11	9.11	-6.14	639,378	790,436	941,494
-20	10.41	7.52	-5.95	480,981	583,155	685,328
-15	7.758	6.12	-5.76	364,396	434,439	504,482
-10	5.834	4.90	-5.58	278,016	326,685	375,354
-5	4.426	3.83	-5.41	213,588	247,868	282,149
0	3.387	2.91	-5.24	165,211	189,691	214,171
5	2.614	2.11	-5.08	128,647	146,372	164,096
10	2.033	1.43	-4.93	100,830	113,844	126,858
15	1.593	0.86	-4.78	79,532	89,221	98,910
20	1.258	0.39	-4.64	63,122	70,437	77,753
25	1.000	0.00	-4.51	50,400	56,000	61,600
30	0.8004	0.37	-4.37	40,175	44,824	49,473
35	0.6449	0.80	-4.25	32,213	36,112	40,010
40	0.5228	1.26	-4.13	25,977	29,275	32,573
45	0.4264	1.77	-4.01	21,065	23,876	26,687
50	0.3497	2.32	-3.90	17,172	19,585	21,998
55	0.2885	2.90	-3.79	14,071	16,155	18,239
60	0.2392	3.51	-3.68	11,588	13,397	15,207
65	0.1994	4.14	-3.58	9,588.4	11,168	12,747
70	0.1671	4.80	-3.49	7,971.1	9,355.7	10,740
75	0.1406	5.48	-3.39	6,656.4	7,875.1	9,093.8
80	0.1189	6.17	-3.30	5,582.7	6,659.4	7,736.2
85	0.1010	6.88	-3.22	4,701.8	5,656.5	6,611.2
90	0.0862	7.60	-3.13	3,976.0	4,825.2	5,674.5
95	0.0738	8.33	-3.05	3,375.4	4,133.1	4,890.9
100	0.0635	9.08	-2.97	2,876.4	3,554.5	4,232.5
105	0.0548	9.83	-2.90	2,460.2	3,068.6	3,677.0
110	0.0475	10.58	-2.83	2,111.6	2,658.9	3,206.3
115	0.0413	11.35	-2.76	1,818.6	2,312.3	2,805.9
120	0.0360	12.11	-2.69	1,571.5	2,017.7	2,464.0
125	0.0315	12.89	-2.62	1,362.3	1,766.6	2,170.9
130	0.0277	13.66	-2.56	1,184.6	1,551.8	1,918.9
135	0.0244	14.43	-2.50	1,033.2	1,367.3	1,701.3
140	0.0216	15.21	-2.44	903.8	1,208.4	1,513.0
145	0.0191	15.98	-2.38	792.8	1,071.0	1,349.3
150	0.0170	16.76	-2.33	697.3	952.0	1,206.7