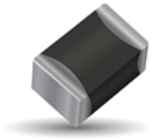
NB12K00822HBF

(0805, 8200 Ohm ±3%, 3630K, 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	8200 Ohm
Tolerance on Resistance (25°C)	±3%
B 25/85	3630K±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

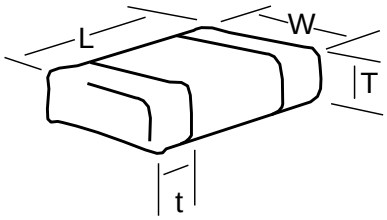
MSL 1
Pb Free
260°C

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	K0	0822	H	BF
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

K0 (B25/85 = 3630K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3581 K	3618 K	3630 K	3646 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	56.27	21.36	-6.25	349,024	461,404	573,785
-50	41.22	18.45	-6.06	265,498	338,002	410,506
-45	30.48	15.86	-5.89	202,773	249,917	297,062
-40	22.74	13.56	-5.71	155,568	186,450	217,332
-35	17.11	11.52	-5.55	119,934	140,306	160,678
-30	12.98	9.71	-5.39	92,934	106,464	119,993
-25	9.931	8.10	-5.24	72,391	81,434	90,478
-20	7.655	6.69	-5.09	56,690	62,773	68,856
-15	5.945	5.45	-4.95	44,633	48,751	52,869
-10	4.651	4.36	-4.81	35,329	38,135	40,941
-5	3.663	3.41	-4.67	28,114	30,039	31,964
0	2.905	2.58	-4.54	22,491	23,821	25,152
5	2.319	1.88	-4.42	18,087	19,014	19,941
10	1.862	1.27	-4.30	14,619	15,272	15,924
15	1.505	0.77	-4.18	11,876	12,341	12,806
20	1.223	0.34	-4.07	9,695.8	10,031	10,367
25	1.000	0.00	-3.96	7,954.0	8,200.0	8,446.0
30	0.8219	0.33	-3.85	6,515.4	6,739.9	6,964.4
35	0.6792	0.71	-3.75	5,362.7	5,569.2	5,775.6
40	0.5641	1.12	-3.65	4,434.6	4,625.4	4,816.2
45	0.4708	1.58	-3.55	3,683.9	3,860.6	4,037.4
50	0.3949	2.07	-3.46	3,073.8	3,237.8	3,401.8
55	0.3327	2.58	-3.37	2,575.8	2,728.0	2,880.2
60	0.2816	3.12	-3.28	2,167.5	2,308.8	2,450.1
65	0.2393	3.69	-3.20	1,831.3	1,962.5	2,093.7
70	0.2043	4.27	-3.12	1,553.3	1,675.1	1,796.9
75	0.1751	4.87	-3.04	1,322.6	1,435.6	1,548.6
80	0.1506	5.49	-2.96	1,130.4	1,235.2	1,340.1
85	0.1301	6.12	-2.89	969.6	1,066.8	1,164.1
90	0.1128	6.76	-2.82	834.5	924.8	1,015.0
95	0.0981	7.41	-2.75	720.7	804.5	888.3
100	0.0856	8.07	-2.68	624.5	702.3	780.0
105	0.0750	8.74	-2.61	542.9	615.1	687.3
110	0.0659	9.42	-2.55	473.4	540.5	607.6
115	0.0581	10.09	-2.49	414.0	476.4	538.7
120	0.0514	10.78	-2.43	363.1	421.2	479.2
125	0.0455	11.46	-2.37	319.4	373.4	427.4
130	0.0405	12.15	-2.32	281.7	332.0	382.4
135	0.0361	12.84	-2.26	249.2	296.1	343.0
140	0.0323	13.53	-2.21	220.9	264.7	308.4
145	0.0289	14.22	-2.16	196.4	237.3	278.1
150	0.0260	14.91	-2.11	175.0	213.2	251.4