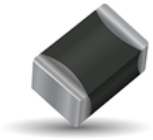
NB12Q00224JBB

(0805, 220 kOhm ±5%, 4300K, 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	220 kOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	4300K±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

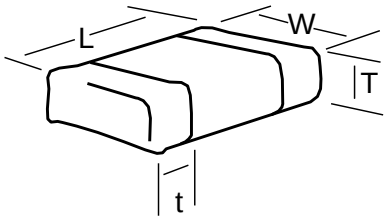
MSL 1
Pb Free
260°C

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	Q0	0224	J	BB
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

Q0 (B25/85 = 4300K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4221 K	4281 K	4300 K	4325 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	98.04	25.30	-6.87	15,033,827	21,569,466	28,105,105
-50	69.53	21.86	-6.70	11,187,514	15,295,719	19,403,925
-45	49.73	18.79	-6.53	8,337,526	10,940,777	13,544,028
-40	35.87	16.07	-6.37	6,228,920	7,891,537	9,554,154
-35	26.08	13.65	-6.22	4,668,492	5,738,588	6,808,685
-30	19.12	11.50	-6.07	3,512,062	4,206,104	4,900,147
-25	14.12	9.60	-5.92	2,653,031	3,106,658	3,560,285
-20	10.51	7.93	-5.78	2,013,007	2,311,839	2,610,670
-15	7.877	6.45	-5.64	1,534,492	1,732,960	1,931,428
-10	5.947	5.16	-5.50	1,175,350	1,308,297	1,441,243
-5	4.521	4.04	-5.37	904,691	994,567	1,084,443
0	3.460	3.06	-5.24	699,833	761,199	822,565
5	2.666	2.22	-5.11	544,084	586,444	628,804
10	2.067	1.51	-4.99	425,131	454,726	484,322
15	1.613	0.91	-4.87	333,858	354,814	375,771
20	1.266	0.41	-4.75	263,496	278,557	293,617
25	1.000	0.00	-4.63	209,000	220,000	231,000
30	0.7944	0.39	-4.52	165,346	174,769	184,193
35	0.6347	0.84	-4.41	131,479	139,630	147,782
40	0.5099	1.33	-4.30	105,074	112,177	119,281
45	0.4119	1.87	-4.20	84,386	90,611	96,836
50	0.3344	2.45	-4.09	68,099	73,578	79,057
55	0.2730	3.06	-3.99	55,216	60,055	64,893
60	0.2239	3.70	-3.90	44,978	49,263	53,548
65	0.1846	4.37	-3.80	36,805	40,609	44,412
70	0.1529	5.06	-3.71	30,251	33,634	37,017
75	0.1272	5.77	-3.62	24,973	27,987	31,001
80	0.1063	6.50	-3.53	20,702	23,393	26,084
85	0.0893	7.25	-3.44	17,234	19,639	22,045
90	0.0753	8.01	-3.36	14,404	16,558	18,712
95	0.0637	8.78	-3.28	12,086	14,019	15,951
100	0.0542	9.57	-3.20	10,181	11,916	13,652
105	0.0462	10.36	-3.13	8,607.8	10,169	11,731
110	0.0396	11.15	-3.05	7,304.4	8,711.8	10,119
115	0.0340	11.96	-2.98	6,220.4	7,490.8	8,761.2
120	0.0294	12.77	-2.91	5,315.7	6,464.2	7,612.8
125	0.0254	13.58	-2.84	4,557.8	5,597.9	6,638.0
130	0.0221	14.39	-2.77	3,920.9	4,864.2	5,807.6
135	0.0193	15.21	-2.71	3,383.7	4,240.7	5,097.8
140	0.0169	16.03	-2.64	2,929.2	3,709.1	4,489.0
145	0.0148	16.84	-2.58	2,543.4	3,254.2	3,965.0
150	0.0130	17.66	-2.52	2,214.9	2,863.8	3,512.7