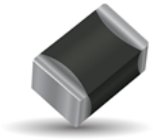
NB12Q00274JBB

(0805, 270 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	270 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

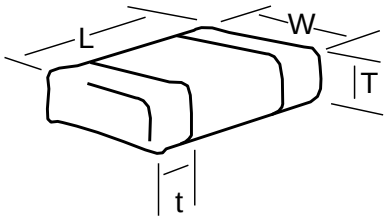
MSL 1
Pb Free
260°C

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	0274	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	18,450,606	26,471,617	34,492,629
-50	69.53	21.86	-6.70	13,730,130	18,772,019	23,813,908
-45	49.73	18.79	-6.53	10,232,419	13,427,317	16,622,216
-40	35.87	16.07	-6.37	7,644,584	9,685,068	11,725,552
-35	26.08	13.65	-6.22	5,729,512	7,042,813	8,356,114
-30	19.12	11.50	-6.07	4,310,257	5,162,037	6,013,816
-25	14.12	9.60	-5.92	3,255,993	3,812,717	4,369,441
-20	10.51	7.93	-5.78	2,470,509	2,837,257	3,204,005
-15	7.877	6.45	-5.64	1,883,240	2,126,814	2,370,388
-10	5.947	5.16	-5.50	1,442,475	1,605,637	1,768,798
-5	4.521	4.04	-5.37	1,110,303	1,220,605	1,330,907
0	3.460	3.06	-5.24	858,886	934,198	1,009,511
5	2.666	2.22	-5.11	667,740	719,727	771,714
10	2.067	1.51	-4.99	521,751	558,073	594,395
15	1.613	0.91	-4.87	409,735	435,454	461,173
20	1.266	0.41	-4.75	323,382	341,865	360,348
25	1.000	0.00	-4.63	256,500	270,000	283,500
30	0.7944	0.39	-4.52	202,925	214,490	226,055
35	0.6347	0.84	-4.41	161,360	171,365	181,369
40	0.5099	1.33	-4.30	128,954	137,672	146,390
45	0.4119	1.87	-4.20	103,564	111,204	118,844
50	0.3344	2.45	-4.09	83,576	90,300	97,024
55	0.2730	3.06	-3.99	67,765	73,704	79,642
60	0.2239	3.70	-3.90	55,201	60,460	65,718
65	0.1846	4.37	-3.80	45,170	49,838	54,506
70	0.1529	5.06	-3.71	37,127	41,279	45,430
75	0.1272	5.77	-3.62	30,648	34,348	38,047
80	0.1063	6.50	-3.53	25,408	28,710	32,012
85	0.0893	7.25	-3.44	21,150	24,102	27,055
90	0.0753	8.01	-3.36	17,678	20,321	22,965
95	0.0637	8.78	-3.28	14,833	17,205	19,576
100	0.0542	9.57	-3.20	12,495	14,625	16,755
105	0.0462	10.36	-3.13	10,564	12,481	14,397
110	0.0396	11.15	-3.05	8,964.5	10,692	12,419
115	0.0340	11.96	-2.98	7,634.2	9,193.3	10,752
120	0.0294	12.77	-2.91	6,523.8	7,933.4	9,342.9
125	0.0254	13.58	-2.84	5,593.7	6,870.2	8,146.6
130	0.0221	14.39	-2.77	4,812.0	5,969.8	7,127.5
135	0.0193	15.21	-2.71	4,152.7	5,204.5	6,256.4
140	0.0169	16.03	-2.64	3,594.9	4,552.0	5,509.2
145	0.0148	16.84	-2.58	3,121.4	3,993.8	4,866.2
150	0.0130	17.66	-2.52	2,718.2	3,514.7	4,311.1