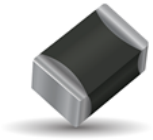
NB12R00105J--

(0805, 1 MOhm ±5%, 4400K, 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	1 MOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	4400K±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

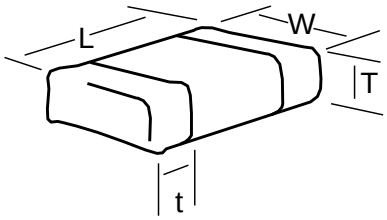
MSL 1
Pb Free
260°C

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	R0	0105	J	--
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

R0 (B25/85 = 4400K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
4326 K	4382 K	4400 K	4423 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	113.9	25.89	-7.13	78,703,789	113,877,884	149,051,978
-50	79.71	22.37	-6.95	57,893,808	79,705,981	101,518,153
-45	56.30	19.23	-6.77	42,661,996	56,304,724	69,947,451
-40	40.13	16.44	-6.60	31,526,421	40,131,006	48,735,592
-35	28.85	13.96	-6.44	23,380,857	28,852,467	34,324,077
-30	20.92	11.77	-6.28	17,411,580	20,919,268	24,426,955
-25	15.29	9.82	-6.12	13,025,172	15,292,174	17,559,176
-20	11.27	8.11	-5.97	9,790,935	11,268,206	12,745,478
-15	8.368	6.60	-5.82	7,396,940	8,367,795	9,338,651
-10	6.261	5.28	-5.68	5,617,348	6,261,086	6,904,823
-5	4.719	4.13	-5.53	4,288,490	4,719,386	5,150,281
0	3.583	3.13	-5.40	3,291,523	3,582,914	3,874,305
5	2.739	2.27	-5.26	2,539,923	2,739,192	2,938,462
10	2.108	1.54	-5.13	1,970,500	2,108,466	2,246,433
15	1.634	0.93	-5.00	1,536,939	1,633,778	1,730,617
20	1.274	0.42	-4.88	1,205,164	1,274,172	1,343,181
25	1.000	0.00	-4.75	950,000	1,000,000	1,050,000
30	0.7897	0.40	-4.64	747,006	789,656	832,305
35	0.6273	0.86	-4.52	590,552	627,296	664,040
40	0.5012	1.36	-4.41	469,334	501,229	533,125
45	0.4028	1.91	-4.30	374,929	402,776	430,622
50	0.3255	2.50	-4.19	301,032	325,452	349,872
55	0.2644	3.13	-4.09	242,900	264,389	285,879
60	0.2159	3.78	-3.98	196,944	215,909	234,875
65	0.1772	4.47	-3.89	160,440	177,218	193,996
70	0.1462	5.18	-3.79	131,307	146,181	161,055
75	0.1212	5.90	-3.70	107,950	121,162	134,374
80	0.1009	6.65	-3.60	89,138	100,895	112,652
85	0.0844	7.42	-3.52	73,921	84,401	94,881
90	0.0709	8.20	-3.43	61,558	70,916	80,274
95	0.0598	8.99	-3.35	51,472	59,842	68,211
100	0.0507	9.79	-3.26	43,210	50,708	58,206
105	0.0431	10.60	-3.19	36,414	43,143	49,872
110	0.0369	11.41	-3.11	30,802	36,851	42,899
115	0.0316	12.24	-3.03	26,151	31,597	37,043
120	0.0272	13.06	-2.96	22,281	27,193	32,105
125	0.0235	13.89	-2.89	19,049	23,487	27,925
130	0.0204	14.73	-2.82	16,341	20,357	24,374
135	0.0177	15.56	-2.76	14,064	17,705	21,345
140	0.0154	16.40	-2.69	12,143	15,449	18,754
145	0.0135	17.23	-2.63	10,516	13,523	16,530
150	0.0119	18.07	-2.57	9,135.1	11,874	14,614