

NTC SMD Thermistor with Ni/Sn termination

for Automotive, Industrial and General applications

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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	4700 Ohm
Tolerance on Resistance (25°C)	$\pm 5\%$
B 25/85	3480K $\pm 3\%$
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)



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	J0	0472	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 = $\pm 3\%*$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	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 believed 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

J0 (B25/85 = 3480K $\pm 3\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	51.75	20.47	-6.23
-50	37.98	17.69	-6.03
-45	28.15	15.21	-5.84
-40	21.07	13.00	-5.65
-35	15.91	11.04	-5.48
-30	12.13	9.31	-5.31
-25	9.321	7.77	-5.15
-20	7.222	6.41	-4.99
-15	5.640	5.22	-4.84
-10	4.438	4.18	-4.69
-5	3.517	3.27	-4.55
0	2.807	2.48	-4.42
5	2.255	1.80	-4.29
10	1.824	1.22	-4.17
15	1.484	0.73	-4.05
20	1.215	0.33	-3.93
25	1.000	0.00	-3.82
30	0.8278	0.32	-3.71
35	0.6889	0.68	-3.61
40	0.5763	1.08	-3.51
45	0.4845	1.51	-3.41
50	0.4092	1.98	-3.32
55	0.3472	2.47	-3.23
60	0.2960	2.99	-3.15
65	0.2533	3.53	-3.06
70	0.2177	4.09	-2.98
75	0.1879	4.67	-2.90
80	0.1628	5.26	-2.83
85	0.1415	5.87	-2.76
90	0.1235	6.48	-2.69
95	0.1081	7.11	-2.62
100	0.0950	7.74	-2.55
105	0.0837	8.38	-2.49
110	0.0740	9.03	-2.43
115	0.0656	9.68	-2.37
120	0.0584	10.33	-2.31
125	0.0521	10.99	-2.26
130	0.0466	11.65	-2.21
135	0.0417	12.31	-2.15
140	0.0375	12.97	-2.10
145	0.0338	13.63	-2.06
150	0.0305	14.29	-2.01

B25/50	B25/75	B25/85	B25/100	B Tol
3443 K	3471 K	3480 K	3492 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
181,268	243,231	305,194
137,997	178,498	218,998
105,573	132,313	159,053
81,197	99,025	116,853
62,797	74,798	86,799
48,845	57,001	65,156
38,214	43,808	49,403
30,070	33,945	37,819
23,799	26,509	29,219
18,944	20,858	22,773
15,165	16,532	17,898
12,207	13,194	14,180
9,879.8	10,601	11,321
8,038.8	8,572.0	9,105.3
6,574.9	6,974.8	7,374.7
5,404.9	5,709.1	6,013.3
4,465.0	4,700.0	4,935.0
3,683.8	3,890.7	4,097.6
3,054.1	3,238.0	3,421.8
2,544.0	2,708.6	2,873.2
2,128.7	2,277.0	2,425.3
1,789.1	1,923.3	2,057.6
1,510.1	1,632.1	1,754.0
1,279.9	1,391.0	1,502.2
1,089.1	1,190.7	1,292.3
930.4	1,023.4	1,116.5
797.7	883.1	968.5
686.5	765.0	843.5
592.9	665.2	737.4
513.8	580.4	647.0
446.7	508.2	569.7
389.6	446.5	503.3
340.8	393.5	446.1
299.1	347.9	396.7
263.2	308.5	353.8
232.3	274.4	316.4
205.6	244.7	283.8
182.4	218.8	255.3
162.2	196.2	230.2
144.7	176.4	208.1
129.3	158.9	188.6
115.9	143.6	171.3