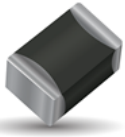


## NTC SMD Thermistor with Ni/Sn termination

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	820 Ohm
Tolerance on Resistance (25°C)	$\pm 20\%$
B 25/85	3910K $\pm 3\%$
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)



RoHS  
COMPLIANT

MSL 1  
Pb Free  
260°C

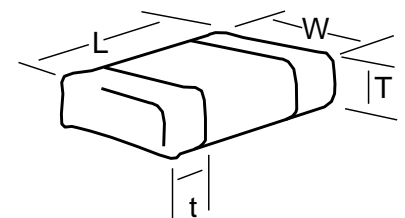


AEC-Q200  
based qualification

## Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0805	2.0 $\pm 0.3$	1.25 $\pm 0.2$	1.3 max	0.2 min
	(0.079 $\pm 0.012$ )	(0.049 $\pm 0.008$ )	(0.051) max	(0.008) min



## How to Order (Packaging options)

<b>NB</b>	<b>12</b>	<b>MC</b>	<b>0821</b>	<b>M</b>	<b>BB</b>
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

MC (B25/85 = 3910K $\pm 3\%$ )

T (°C)	R(T) / R25	TF (%)	$\alpha$ (%/°C)
-55	100.6	23.00	-7.56
-50	69.29	19.90	-7.27
-45	48.40	17.10	-7.00
-40	34.27	14.60	-6.75
-35	24.57	12.40	-6.50
-30	17.83	10.50	-6.27
-25	13.09	8.70	-6.05
-20	9.710	7.20	-5.84
-15	7.282	5.90	-5.64
-10	5.514	4.70	-5.45
-5	4.215	3.70	-5.27
0	3.250	2.80	-5.10
5	2.528	2.00	-4.93
10	1.982	1.40	-4.77
15	1.567	0.80	-4.62
20	1.247	0.40	-4.48
25	1.000	0.00	-4.34
30	0.8072	0.40	-4.21
35	0.6559	0.80	-4.08
40	0.5362	1.20	-3.96
45	0.4410	1.70	-3.85
50	0.3647	2.20	-3.74
55	0.3033	2.80	-3.63
60	0.2535	3.40	-3.53
65	0.2130	4.00	-3.43
70	0.1798	4.60	-3.34
75	0.1525	5.20	-3.25
80	0.1300	5.90	-3.16
85	0.1112	6.60	-3.08
90	0.0955	7.30	-2.99
95	0.0824	8.00	-2.92
100	0.0713	8.70	-2.84
105	0.0620	9.40	-2.77
110	0.0541	10.10	-2.70
115	0.0473	10.90	-2.63
120	0.0415	11.60	-2.57
125	0.0366	12.30	-2.51
130	0.0323	13.10	-2.45
135	0.0286	13.80	-2.39
140	0.0254	14.60	-2.33
145	0.0227	15.30	-2.28
150	0.0203	16.10	-2.23

B25/50	B25/75	B25/85	B25/100	B Tol
3887 K	3904 K	3910 K	3917 K	$\pm 3\%$

R Min ( $\Omega$ )	R Nom ( $\Omega$ )	R Max ( $\Omega$ )
47,020	82,492	117,964
34,147	56,818	79,488
24,964	39,688	54,412
18,378	28,101	37,824
13,620	20,147	26,675
10,161	14,621	19,080
7,653.2	10,734	13,814
5,796.5	7,962.2	10,128
4,424.7	5,971.2	7,517.8
3,404.7	4,521.5	5,638.3
2,637.2	3,456.3	4,275.4
2,057.4	2,665.0	3,272.6
1,616.9	2,073.0	2,529.0
1,277.4	1,625.2	1,973.0
1,017.7	1,284.9	1,552.2
813.9	1,022.5	1,231.1
656.0	820.0	984.0
526.9	661.9	796.9
426.0	537.8	649.7
346.5	439.7	532.9
283.1	361.6	440.1
232.7	299.1	365.4
192.0	248.7	305.4
159.2	207.9	256.5
132.7	174.7	216.6
111.2	147.4	183.7
93.5	125.1	156.6
79.0	106.6	134.2
66.9	91.2	115.4
56.9	78.3	99.7
48.6	67.6	86.5
41.7	58.5	75.3
35.9	50.8	65.8
31.0	44.3	57.7
26.8	38.8	50.8
23.3	34.1	44.8
20.3	30.0	39.7
17.7	26.5	35.3
15.5	23.5	31.4
13.6	20.9	28.1
12.0	18.6	25.2
10.6	16.6	22.6