

## NTC SMD Thermistor with AgPdPt 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. AgPdPt termination termination for conductive adhesive assembly (not suitable for lead free soldering - use NB series).

## Characteristics

Case Size	0805
Operating temperature	-55°C to +150°C
Resistance	22 kOhm
Tolerance on Resistance (25°C)	$\pm 5\%$
B 25/85	3950K $\pm 3\%$
Maximum dissipation at 25°C	0.12 W
Thermal dissipation factor	2 mW/°C
Thermal time constant	5 s
Termination	AgPdPt (for conductive adhesive)



MSL 1



**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>NC</b>	<b>12</b>	<b>M0</b>	<b>0223</b>	<b>J</b>	<b>--</b>
Type	Size	Material Code	Resistance (Ohm)	Tolerance	Suffix: Packaging
NC = AgPdPt for conductive adhesive	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

**M0 (B25/85 = 3950K $\pm 3\%$ )**

T (°C)	R(T) / R25	TF (%)	$\alpha$ (%/°C)
-55	99.59	15.64	-7.42
-50	68.97	14.25	-7.16
-45	48.40	12.94	-6.91
-40	34.38	11.69	-6.67
-35	24.71	10.51	-6.45
-30	17.97	9.39	-6.23
-25	13.20	8.33	-6.02
-20	9.804	7.31	-5.82
-15	7.352	6.35	-5.63
-10	5.565	5.43	-5.45
-5	4.251	4.55	-5.28
0	3.275	3.70	-5.11
5	2.544	2.90	-4.95
10	1.992	2.13	-4.80
15	1.572	1.39	-4.65
20	1.249	0.68	-4.51
25	1.000	0.00	-4.38
30	0.8057	0.66	-4.25
35	0.6534	1.30	-4.12
40	0.5331	1.92	-4.00
45	0.4376	2.53	-3.89
50	0.3612	3.12	-3.77
55	0.2998	3.70	-3.67
60	0.2501	4.26	-3.57
65	0.2097	4.81	-3.47
70	0.1767	5.35	-3.37
75	0.1496	5.87	-3.28
80	0.1272	6.38	-3.19
85	0.1087	6.88	-3.11
90	0.0932	7.37	-3.03
95	0.0803	7.84	-2.95
100	0.0694	8.31	-2.87
105	0.0602	8.76	-2.80
110	0.0524	9.21	-2.73
115	0.0458	9.64	-2.66
120	0.0402	10.07	-2.60
125	0.0353	10.48	-2.53
130	0.0312	10.89	-2.47
135	0.0276	11.29	-2.41
140	0.0245	11.68	-2.36
145	0.0218	12.06	-2.30
150	0.0194	12.43	-2.25

B25/50	B25/75	B25/85	B25/100	B Tol
3925 K	3944 K	3950 K	3958 K	$\pm 3\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
1,738,813	2,190,985	2,643,156
1,225,321	1,517,437	1,809,554
873,706	1,064,692	1,255,678
630,076	756,345	882,615
459,339	543,693	628,047
338,373	395,270	452,168
251,765	290,484	329,202
189,128	215,689	242,251
143,386	161,740	180,095
109,670	122,435	135,200
84,594	93,521	102,448
65,784	72,056	78,327
51,557	55,978	60,400
40,709	43,834	46,958
32,376	34,586	36,795
25,927	27,488	29,049
20,900	22,000	23,100
16,723	17,726	18,729
13,469	14,374	15,279
10,916	11,728	12,540
8,901.3	9,626.2	10,351
7,300.5	7,945.9	8,591.3
6,021.1	6,594.8	7,168.6
4,992.7	5,502.3	6,012.0
4,161.3	4,614.0	5,066.8
3,485.6	3,888.0	4,290.3
2,933.7	3,291.5	3,649.3
2,480.5	2,799.1	3,117.7
2,106.7	2,390.7	2,674.7
1,796.8	2,050.4	2,303.9
1,538.8	1,765.6	1,992.3
1,323.1	1,526.2	1,729.4
1,142.0	1,324.3	1,506.5
989.4	1,153.2	1,317.0
860.2	1,007.7	1,155.2
750.4	883.5	1,016.6
656.8	777.1	897.4
576.8	685.7	794.6
508.0	606.8	705.7
448.8	538.6	628.4
397.7	479.4	561.2
353.3	427.9	502.5