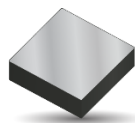


NTC Accurate Thermistor for Wirebonding

for Automotive, Industrial and General applications



KYOCERA AVX Accurate NTC Thermistors are high quality devices with tight tolerance widely used for accurate temperature measurement, compensation, regulation, liquid level or flow detection in wide range of applications, including automotive, industrial and general purpose. Parts have Ag top and bottom surface, suitable for wirebonding.

Characteristics

Chip Size	0707 typ
Operating temperature	-55°C to +150°C
Resistance	3000 Ohm
Tolerance on Resistance (25°C)	$\pm 5\%$
B 25/85	3965K $\pm 0.5\%$
Maximum dissipation at 25°C	0.16 W
Thermal dissipation factor	2 mW/°C
Thermal time constant	6 s
Top and Bottom Surface	Ag



RoHS
COMPLIANT
MSL 1



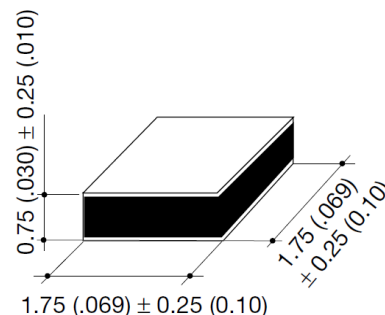
AEC-Q200
based
qualification

Dimensions

mm (inches)

Length	Width	Thickness
1.75 ± 0.25	1.75 ± 0.25	0.75 ± 0.25
(0.069 ± 0.01)	(0.069 ± 0.01)	(.030 ± 0.010)

Dimensions are for reference only, for actual dimensions on specific PN, please contact KYOCERA AVX



How to Order (Packaging options)

NK	20	MA	0302	J	--
Type	Size	Material Code	Resistance (Ohm)	Tolerance	Suffix: Packaging
NK = Chip with Ag top and bottom surface (for wirebonding)	20 = 0707 (typ)	See Datasheet	2 Sig. Digits + Number of Zeros	F = $\pm 1\%$ G = $\pm 2\%$ H = $\pm 3\%$ J = $\pm 5\%$	-- = Bulk (1000 pcs/bag)

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

MA (B25/85 = 3965K $\pm 0.5\%$)

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	101.1	2.47	-7.49
-50	69.81	2.26	-7.22
-45	48.87	2.06	-6.96
-40	34.65	1.87	-6.71
-35	24.87	1.69	-6.48
-30	18.06	1.52	-6.26
-25	13.26	1.35	-6.05
-20	9.837	1.19	-5.84
-15	7.372	1.04	-5.65
-10	5.578	0.89	-5.47
-5	4.259	0.75	-5.29
0	3.280	0.61	-5.12
5	2.548	0.48	-4.96
10	1.994	0.35	-4.81
15	1.573	0.23	-4.66
20	1.250	0.11	-4.52
25	1.000	0.00	-4.38
30	0.8054	0.11	-4.25
35	0.6528	0.22	-4.13
40	0.5324	0.32	-4.01
45	0.4368	0.42	-3.90
50	0.3603	0.52	-3.79
55	0.2989	0.61	-3.68
60	0.2492	0.70	-3.58
65	0.2088	0.79	-3.48
70	0.1758	0.88	-3.39
75	0.1487	0.96	-3.30
80	0.1263	1.04	-3.21
85	0.1078	1.12	-3.13
90	0.0923	1.20	-3.05
95	0.0794	1.27	-2.97
100	0.0686	1.35	-2.90
105	0.0594	1.42	-2.83
110	0.0517	1.49	-2.76
115	0.0451	1.55	-2.69
120	0.0395	1.62	-2.62
125	0.0347	1.68	-2.56
130	0.0305	1.75	-2.50
135	0.0270	1.81	-2.44
140	0.0239	1.87	-2.39
145	0.0213	1.93	-2.33
150	0.0189	1.98	-2.28

B25/50	B25/75	B25/85	B25/100	B Tol
3934 K	3957 K	3965 K	3975 K	$\pm 0.5\%$

R Min (Ω)	R Nom (Ω)	R Max (Ω)
280,610	303,257	325,904
194,228	209,432	224,636
136,253	146,604	156,956
96,808	103,950	111,092
69,620	74,611	79,602
50,647	54,177	57,707
37,251	39,777	42,302
27,686	29,512	31,339
20,782	22,117	23,452
15,749	16,734	17,719
12,043	12,777	13,511
9,289	9,841	10,393
7,224	7,643	8,062
5,663	5,983	6,303
4,472	4,719	4,966
3,558	3,750	3,941
2,850	3,000	3,150
2,293	2,416	2,540
1,856	1,959	2,061
1,512	1,597	1,682
1,239	1,310	1,381
1,021	1,081	1,141
846.3	896.6	946.9
704.9	747.5	790.1
590.1	626.4	662.6
496.4	527.3	558.3
419.5	446.0	472.6
356.1	378.9	401.8
303.5	323.3	343.1
259.8	277.0	294.2
223.3	238.2	253.2
192.6	205.7	218.7
166.8	178.3	189.7
145.0	155.0	165.1
126.4	135.3	144.1
110.6	118.4	126.3
97.06	104.0	111.0
85.46	91.64	97.82
75.46	80.97	86.49
66.83	71.76	76.68
59.35	63.76	68.18
52.85	56.81	60.78