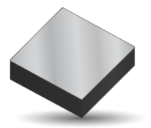
NTC Accurate Thermistor for Wirebonding

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	20 kOhm
Tolerance on Resistance (25°C)	±3%
B 25/85	4235K±1%
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

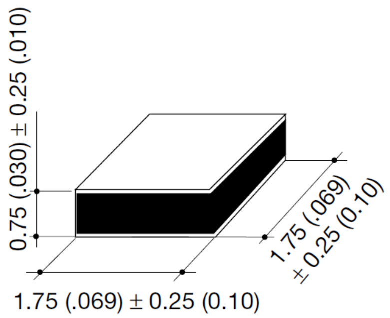
AEC-Q200 based qualification

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±.010)

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



How to Order (Packaging options)

NK	20	PA	0203	H	--
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 = ±1% G = ±2% H = ±3% J = ±5%	-- = Bulk (1000 pcs/bag)

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.

NK20PA0203H--

(0707, 20 kOhm ±3%, 4235K, Cu wire/100% Sn)

Material Table

PA (B25/85 = 4235K±1%)

B25/50	B25/75	B25/85	B25/100	B Tol
4185 K	4222 K	4235 K	4253 K	±1%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	123.4	8.31	-7.68	2,188,729	2,467,756	2,746,782
-50	84.33	7.18	-7.42	1,514,943	1,686,583	1,858,224
-45	58.39	6.17	-7.17	1,060,704	1,167,799	1,274,893
-40	40.93	5.28	-6.93	750,928	818,680	886,431
-35	29.04	4.48	-6.71	537,311	580,756	624,202
-30	20.83	3.78	-6.49	388,417	416,650	444,882
-25	15.11	3.15	-6.29	283,560	302,150	320,740
-20	11.07	2.60	-6.09	208,978	221,380	233,783
-15	8.190	2.12	-5.90	155,419	163,803	172,187
-10	6.117	1.69	-5.72	116,601	122,345	128,089
-5	4.610	1.33	-5.54	88,217	92,205	96,193
0	3.505	1.01	-5.38	67,283	70,091	72,898
5	2.686	0.73	-5.22	51,718	53,721	55,725
10	2.075	0.50	-5.07	40,051	41,502	42,952
15	1.615	0.30	-4.92	31,240	32,305	33,371
20	1.267	0.13	-4.78	24,536	25,330	26,124
25	1.000	0.00	-4.64	19,400	20,000	20,600
30	0.7949	0.13	-4.51	15,400	15,898	16,395
35	0.6359	0.28	-4.39	12,302	12,718	13,135
40	0.5119	0.44	-4.27	9,886	10,238	10,590
45	0.4145	0.61	-4.15	7,991	8,290	8,590
50	0.3376	0.80	-4.04	6,495	6,752	7,008
55	0.2764	1.00	-3.93	5,308	5,529	5,750
60	0.2276	1.21	-3.83	4,360	4,552	4,744
65	0.1883	1.43	-3.73	3,599	3,766	3,933
70	0.1566	1.66	-3.63	2,986	3,132	3,278
75	0.1308	1.89	-3.54	2,489	2,617	2,745
80	0.1098	2.13	-3.45	2,083	2,196	2,309
85	0.0926	2.38	-3.37	1,752	1,851	1,951
90	0.0784	2.63	-3.28	1,479	1,567	1,656
95	0.0666	2.88	-3.20	1,254	1,332	1,411
100	0.0569	3.14	-3.13	1,067	1,137	1,207
105	0.0487	3.40	-3.05	911.7	974.1	1,036
110	0.0419	3.66	-2.98	781.8	837.6	893.4
115	0.0361	3.93	-2.91	672.7	722.8	772.8
120	0.0313	4.19	-2.84	580.8	625.8	670.9
125	0.0272	4.46	-2.78	503.2	543.7	584.3
130	0.0237	4.73	-2.71	437.3	473.9	510.5
135	0.0207	4.99	-2.65	381.2	414.4	447.5
140	0.0182	5.26	-2.59	333.4	363.4	393.4
145	0.0160	5.53	-2.54	292.3	319.6	346.9
150	0.0141	5.80	-2.48	257.1	281.9	306.7