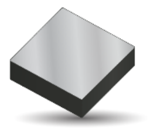
NK20ME0103F--

(0707, 10 kOhm ±1%, 3975K, Cu wire/100% Sn)

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	10 kOhm
Tolerance on Resistance (25°C)	±1%
B 25/85	3975K±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

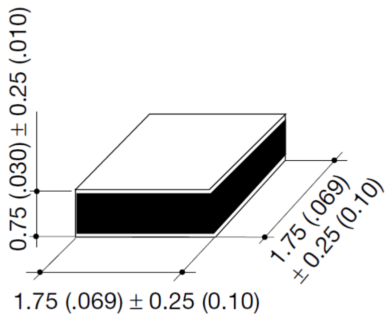
AEC-Q200 based qualification

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±.010)

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



How to Order (Packaging options)

NK	20	ME	0103	F	--
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)

Material Table

ME (B25/85 = 3975K±0.5%)

B25/50	B25/75	B25/85	B25/100	B Tol
3946 K	3968 K	3975 K	3985 K	±0.5%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	103.9	2.47	-7.56	1,002,916	1,038,947	1,074,978
-50	71.53	2.26	-7.28	692,024	715,342	738,659
-45	49.94	2.06	-7.01	484,076	499,360	514,644
-40	35.32	1.87	-6.76	343,035	353,174	363,313
-35	25.29	1.69	-6.53	246,102	252,903	259,703
-30	18.32	1.52	-6.30	178,639	183,248	187,857
-25	13.43	1.35	-6.08	131,122	134,276	137,429
-20	9.945	1.19	-5.88	97,270	99,447	101,623
-15	7.440	1.04	-5.68	72,890	74,404	75,919
-10	5.621	0.89	-5.50	55,148	56,210	57,271
-5	4.286	0.75	-5.32	42,110	42,858	43,607
0	3.297	0.61	-5.15	32,437	32,968	33,499
5	2.557	0.48	-4.98	25,195	25,574	25,952
10	2.000	0.35	-4.83	19,727	19,998	20,269
15	1.576	0.23	-4.68	15,565	15,759	15,952
20	1.251	0.11	-4.54	12,370	12,509	12,649
25	1.000	0.00	-4.40	9,900	10,000	10,100
30	0.8048	0.11	-4.27	7,959	8,048	8,137
35	0.6519	0.22	-4.14	6,440	6,519	6,598
40	0.5313	0.32	-4.02	5,243	5,313	5,383
45	0.4356	0.42	-3.91	4,294	4,356	4,418
50	0.3591	0.52	-3.80	3,537	3,591	3,646
55	0.2977	0.61	-3.69	2,929	2,977	3,025
60	0.2481	0.70	-3.59	2,439	2,481	2,523
65	0.2078	0.79	-3.49	2,041	2,078	2,115
70	0.1749	0.88	-3.40	1,716	1,749	1,782
75	0.1479	0.96	-3.31	1,450	1,479	1,508
80	0.1256	1.04	-3.22	1,230	1,256	1,282
85	0.1071	1.12	-3.14	1,049	1,071	1,094
90	0.0918	1.20	-3.06	897.4	917.5	937.7
95	0.0789	1.27	-2.98	771.0	789.0	806.9
100	0.0681	1.35	-2.90	665.1	681.0	697.0
105	0.0590	1.42	-2.83	575.8	590.0	604.3
110	0.0513	1.49	-2.76	500.3	513.0	525.8
115	0.0448	1.55	-2.69	436.2	447.6	459.0
120	0.0392	1.62	-2.63	381.5	391.8	402.1
125	0.0344	1.68	-2.57	334.8	344.1	353.3
130	0.0303	1.75	-2.50	294.8	303.1	311.4
135	0.0268	1.81	-2.45	260.3	267.8	275.3
140	0.0237	1.87	-2.39	230.5	237.3	244.1
145	0.0211	1.93	-2.34	204.7	210.8	217.0
150	0.0188	1.98	-2.28	182.2	187.8	193.4