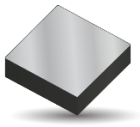
NK20MN0302J--

(0707, 3000 Ohm ±5%, 4077K, 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	3000 Ohm
Tolerance on Resistance (25°C)	±5%
B 25/85	4077K±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

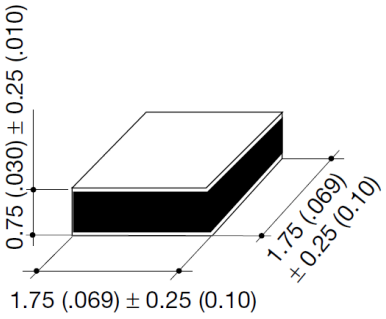
AEC-Q200 based qualification

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	MN	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 = ±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.

Material Table

MN (B25/85 = 4077K±0.5%)

B25/50	B25/75	B25/85	B25/100	B Tol
4031 K	4065 K	4077 K	4093 K	±0.5%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	103.6	2.54	-7.39	287,250	310,670	334,089
-50	71.79	2.32	-7.14	199,592	215,366	231,140
-45	50.39	2.12	-6.90	140,403	151,165	161,927
-40	35.79	1.92	-6.68	99,933	107,367	114,801
-35	25.71	1.74	-6.46	71,930	77,127	82,323
-30	18.67	1.56	-6.25	52,332	56,005	59,678
-25	13.70	1.39	-6.06	38,466	41,090	43,715
-20	10.15	1.22	-5.87	28,552	30,446	32,341
-15	7.591	1.06	-5.68	21,393	22,774	24,155
-10	5.730	0.91	-5.51	16,173	17,189	18,206
-5	4.362	0.77	-5.34	12,333	13,087	13,842
0	3.349	0.63	-5.18	9,482	10,047	10,613
5	2.592	0.49	-5.03	7,348	7,775	8,202
10	2.021	0.36	-4.88	5,737	6,063	6,388
15	1.587	0.24	-4.74	4,513	4,762	5,012
20	1.256	0.12	-4.60	3,574	3,767	3,960
25	1.000	0.00	-4.47	2,850	3,000	3,150
30	0.8016	0.11	-4.35	2,282	2,405	2,528
35	0.6465	0.22	-4.23	1,838	1,940	2,041
40	0.5246	0.33	-4.11	1,490	1,574	1,658
45	0.4281	0.43	-4.00	1,215	1,284	1,354
50	0.3514	0.53	-3.89	995.8	1,054	1,112
55	0.2899	0.63	-3.79	820.7	869.7	918.6
60	0.2404	0.72	-3.69	680.0	721.2	762.5
65	0.2004	0.81	-3.59	566.1	601.1	636.0
70	0.1678	0.90	-3.50	473.6	503.3	533.0
75	0.1411	0.99	-3.41	398.1	423.4	448.8
80	0.1193	1.07	-3.32	336.1	357.8	379.5
85	0.1012	1.15	-3.24	284.9	303.6	322.3
90	0.0862	1.23	-3.16	242.6	258.7	274.8
95	0.0738	1.31	-3.08	207.4	221.3	235.3
100	0.0634	1.38	-3.00	177.9	190.1	202.2
105	0.0546	1.46	-2.93	153.3	163.8	174.4
110	0.0472	1.53	-2.86	132.5	141.7	151.0
115	0.0410	1.60	-2.79	114.9	123.0	131.2
120	0.0357	1.67	-2.73	100.0	107.2	114.3
125	0.0312	1.73	-2.66	87.34	93.65	99.95
130	0.0274	1.80	-2.60	76.51	82.09	87.67
135	0.0241	1.86	-2.54	67.22	72.17	77.12
140	0.0212	1.92	-2.49	59.24	63.64	68.05
145	0.0188	1.98	-2.43	52.35	56.28	60.21
150	0.0166	2.04	-2.38	46.39	49.90	53.42