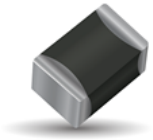
NB21M00333K--

(0603, 33 kOhm ±10%, 3950K, Ni/100% Sn)

NTC SMD Thermistor with Ni/Sn termination

for Automotive, Industrial and General applications

To view data online visit:
SpiCAT



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. Ni barrier/100% Sn plated termination for lead free soldering.

Characteristics

Case Size	0603
Operating temperature	-55°C to +150°C
Resistance	33 kOhm
Tolerance on Resistance (25°C)	±10%
B 25/85	3950K±3%
Maximum dissipation at 25°C	0.07 W
Thermal dissipation factor	1 mW/°C
Thermal time constant	4 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

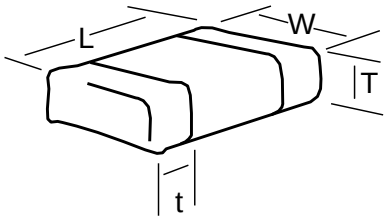
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0603	1.6±0.2	0.8±0.2	1.0 max	0.2 min
	(0.063±0.008)	(0.031±0.008)	(0.039) max	(0.008) min



How to Order (Packaging options)

NB	21	M0	0333	K	--
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	21 = 0603	See Datasheet	2 Sig. Digits + Number of Zeros	H = ±3%* J = ±5% K = ±10% M = ±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 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

M0 (B25/85 = 3950K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3925 K	3944 K	3950 K	3958 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	99.59	15.64	-7.42	2,443,896	3,286,477	4,129,057
-50	68.97	14.25	-7.16	1,724,173	2,276,156	2,828,139
-45	48.40	12.94	-6.91	1,230,707	1,597,038	1,963,370
-40	34.38	11.69	-6.67	888,388	1,134,518	1,380,648
-35	24.71	10.51	-6.45	648,232	815,540	982,848
-30	17.97	9.39	-6.23	477,914	592,906	707,897
-25	13.20	8.33	-6.02	355,861	435,725	515,590
-20	9.804	7.31	-5.82	267,515	323,534	379,553
-15	7.352	6.35	-5.63	202,948	242,611	282,273
-10	5.565	5.43	-5.45	155,322	183,652	211,982
-5	4.251	4.55	-5.28	119,877	140,282	160,687
0	3.275	3.70	-5.11	93,272	108,084	122,895
5	2.544	2.90	-4.95	73,136	83,967	94,798
10	1.992	2.13	-4.80	57,777	65,751	73,725
15	1.572	1.39	-4.65	45,970	51,879	57,787
20	1.249	0.68	-4.51	36,828	41,232	45,636
25	1.000	0.00	-4.38	29,700	33,000	36,300
30	0.8057	0.66	-4.25	23,755	26,589	29,423
35	0.6534	1.30	-4.12	19,125	21,561	23,997
40	0.5331	1.92	-4.00	15,495	17,592	19,690
45	0.4376	2.53	-3.89	12,630	14,439	16,248
50	0.3612	3.12	-3.77	10,355	11,919	13,483
55	0.2998	3.70	-3.67	8,537	9,892	11,247
60	0.2501	4.26	-3.57	7,076	8,253	9,431
65	0.2097	4.81	-3.47	5,896	6,921	7,946
70	0.1767	5.35	-3.37	4,937	5,832	6,727
75	0.1496	5.87	-3.28	4,154	4,937	5,721
80	0.1272	6.38	-3.19	3,511	4,199	4,886
85	0.1087	6.88	-3.11	2,981	3,586	4,191
90	0.0932	7.37	-3.03	2,541	3,076	3,610
95	0.0803	7.84	-2.95	2,176	2,648	3,121
100	0.0694	8.31	-2.87	1,870	2,289	2,708
105	0.0602	8.76	-2.80	1,614	1,986	2,359
110	0.0524	9.21	-2.73	1,398	1,730	2,062
115	0.0458	9.64	-2.66	1,215	1,512	1,808
120	0.0402	10.07	-2.60	1,059	1,325	1,591
125	0.0353	10.48	-2.53	926.9	1,166	1,404
130	0.0312	10.89	-2.47	813.7	1,029	1,243
135	0.0276	11.29	-2.41	716.5	910.3	1,104
140	0.0245	11.68	-2.36	632.8	807.9	983.1
145	0.0218	12.06	-2.30	560.5	719.1	877.8
150	0.0194	12.43	-2.25	497.9	641.8	785.8