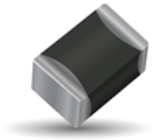
NB21K00153JBF

(0603, 15 kOhm ±5%, 3630K, 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	15 kOhm
Tolerance on Resistance (25°C)	±5%
B 25/85	3630K±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

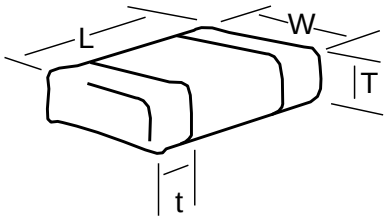
MSL 1
Pb Free
260°C

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	K0	0153	J	BF
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

K0 (B25/85 = 3630K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3581 K	3618 K	3630 K	3646 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	56.27	21.36	-6.25	621,578	844,033	1,066,487
-50	41.22	18.45	-6.06	473,300	618,296	763,291
-45	30.48	15.86	-5.89	361,782	457,165	552,549
-40	22.74	13.56	-5.71	277,754	341,067	404,381
-35	17.11	11.52	-5.55	214,258	256,657	299,056
-30	12.98	9.71	-5.39	166,107	194,750	223,394
-25	9.931	8.10	-5.24	129,444	148,965	168,487
-20	7.655	6.69	-5.09	101,405	114,829	128,253
-15	5.945	5.45	-4.95	79,863	89,179	98,495
-10	4.651	4.36	-4.81	63,232	69,759	76,287
-5	3.663	3.41	-4.67	50,330	54,949	59,569
0	2.905	2.58	-4.54	40,271	43,576	46,881
5	2.319	1.88	-4.42	32,389	34,781	37,173
10	1.862	1.27	-4.30	26,184	27,936	29,689
15	1.505	0.77	-4.18	21,274	22,575	23,876
20	1.223	0.34	-4.07	17,369	18,350	19,330
25	1.000	0.00	-3.96	14,250	15,000	15,750
30	0.8219	0.33	-3.85	11,672	12,329	12,986
35	0.6792	0.71	-3.75	9,606	10,188	10,769
40	0.5641	1.12	-3.65	7,943	8,461	8,979
45	0.4708	1.58	-3.55	6,598	7,062	7,527
50	0.3949	2.07	-3.46	5,504	5,923	6,341
55	0.3327	2.58	-3.37	4,612	4,990	5,369
60	0.2816	3.12	-3.28	3,880	4,223	4,566
65	0.2393	3.69	-3.20	3,278	3,590	3,902
70	0.2043	4.27	-3.12	2,780	3,064	3,348
75	0.1751	4.87	-3.04	2,367	2,626	2,885
80	0.1506	5.49	-2.96	2,023	2,260	2,497
85	0.1301	6.12	-2.89	1,735	1,952	2,169
90	0.1128	6.76	-2.82	1,493	1,692	1,891
95	0.0981	7.41	-2.75	1,289	1,472	1,654
100	0.0856	8.07	-2.68	1,117	1,285	1,453
105	0.0750	8.74	-2.61	970.5	1,125	1,280
110	0.0659	9.42	-2.55	846.1	988.6	1,131
115	0.0581	10.09	-2.49	739.9	871.4	1,003
120	0.0514	10.78	-2.43	648.9	770.4	891.9
125	0.0455	11.46	-2.37	570.6	683.1	795.6
130	0.0405	12.15	-2.32	503.2	607.4	711.6
135	0.0361	12.84	-2.26	445.0	541.6	638.2
140	0.0323	13.53	-2.21	394.5	484.2	573.9
145	0.0289	14.22	-2.16	350.6	434.0	517.4
150	0.0260	14.91	-2.11	312.3	390.0	467.6