NB12K00103HBB

(0805, 10 kOhm ±3%, 3630 K, Sn Term)

NTC Chip Thermistor Datasheet

BASIC SPECIFICATION

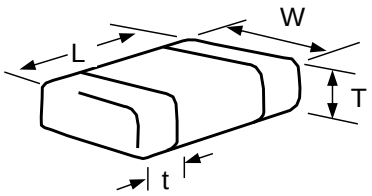
Case Size [EIA]	0805
Operating Temperature	-55 to +150°C
Grade	Automotive & General
Qualification	AEC-Q200 based
Termination	Sn
Assembly	Pb Free Reflow
RoHS	Yes
MSL Level	1
Packaging	T&R 7in (180mm)
Packaging Qty	4000

AEC-Q200 based Qual | **RoHS Compliant** | **Click for Online Data**

ELECTRICAL CHARACTERISTICS

Resistance [25°C]	10 kOhm
Resistance Tolerance [25°C]	±3%
B Value (25/85)	3630 K
B Value Tolerance	±3%
B Value (25/50)	3581 K
B Value (25/100)	3646 K
Maximum Dissipation [25°C]	0.12 W
Thermal Dissipation Factor	2 mW/°C
Thermal Time Constant	5 s

DIMENSIONS



	mm	inches
L	2.0±0.3	0.079±0.012
W	1.25±0.2	0.049±0.008
T	1.3 max	0.051 max
t	0.2 min	0.008 min

HOW TO ORDER

NB	12	K0	0103	H	BB
Type	Case Size	Material Code	Resistance	Tolerance	Packaging
NB = Sn Term	12 = 0805	K0 = 3630 K	0103 = 10 kOhm	H = ±3%	BB = Cardboard tape (180mm reel, 4000 pcs/reel) BF = Cardboard tape (180mm reel, 2000 pcs/reel) BD = Cardboard tape (330mm reel, 10000 pcs/reel) -- = Bulk (5000 pcs/bag)

© KYOCERA AVX

NB12K00103HBB

(0805, 10 kOhm ±3%, 3630 K, Sn Term)

NTC Chip Thermistor Datasheet

MATERIAL TABLE

T (°C)	R(T) / R25	TF (%)	α (%/°C)
-55	56.27	21.36	-6.25
-50	41.22	18.45	-6.06
-45	30.48	15.86	-5.89
-40	22.74	13.56	-5.71
-35	17.11	11.52	-5.55
-30	12.98	9.71	-5.39
-25	9.931	8.10	-5.24
-20	7.655	6.69	-5.09
-15	5.945	5.45	-4.95
-10	4.651	4.36	-4.81
-5	3.663	3.41	-4.67
0	2.905	2.58	-4.54
5	2.319	1.88	-4.42
10	1.862	1.27	-4.30
15	1.505	0.77	-4.18
20	1.223	0.34	-4.07
25	1.000	0.00	-3.96
30	0.8219	0.33	-3.85
35	0.6792	0.71	-3.75
40	0.5641	1.12	-3.65
45	0.4708	1.58	-3.55
50	0.3949	2.07	-3.46
55	0.3327	2.58	-3.37
60	0.2816	3.12	-3.28
65	0.2393	3.69	-3.20
70	0.2043	4.27	-3.12
75	0.1751	4.87	-3.04
80	0.1506	5.49	-2.96
85	0.1301	6.12	-2.89
90	0.1128	6.76	-2.82
95	0.0981	7.41	-2.75
100	0.0856	8.07	-2.68
105	0.0750	8.74	-2.61
110	0.0659	9.42	-2.55
115	0.0581	10.09	-2.49
120	0.0514	10.78	-2.43
125	0.0455	11.46	-2.37
130	0.0405	12.15	-2.32
135	0.0361	12.84	-2.26
140	0.0323	13.53	-2.21
145	0.0289	14.22	-2.16
150	0.0260	14.91	-2.11

RESISTANCE/TEMPERATURE

T (°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	425,639	562,688	699,738
-50	323,778	412,197	500,617
-45	247,284	304,777	362,270
-40	189,717	227,378	265,039
-35	146,261	171,105	195,949
-30	113,334	129,834	146,333
-25	88,282	99,310	110,339
-20	69,135	76,553	83,971
-15	54,431	59,453	64,474
-10	43,085	46,506	49,928
-5	34,286	36,633	38,980
0	27,428	29,050	30,673
5	22,057	23,187	24,318
10	17,828	18,624	19,420
15	14,483	15,050	15,617
20	11,824	12,233	12,642
25	9,700.0	10,000	10,300
30	7,945.6	8,219.4	8,493.2
35	6,539.9	6,791.7	7,043.5
40	5,408.1	5,640.8	5,873.4
45	4,492.5	4,708.1	4,923.7
50	3,748.5	3,948.5	4,148.5
55	3,141.2	3,326.8	3,512.5
60	2,643.2	2,815.6	2,988.0
65	2,233.3	2,393.3	2,553.3
70	1,894.3	2,042.8	2,191.3
75	1,613.0	1,750.8	1,888.6
80	1,378.5	1,506.4	1,634.2
85	1,182.4	1,301.0	1,419.6
90	1,017.7	1,127.8	1,237.9
95	878.9	981.1	1,083.3
100	761.6	856.4	951.3
105	662.0	750.1	838.2
110	577.3	659.1	740.9
115	504.9	580.9	657.0
120	442.8	513.6	584.4
125	389.5	455.4	521.3
130	343.6	404.9	466.3
135	303.9	361.1	418.2
140	269.4	322.8	376.1
145	239.5	289.3	339.1
150	213.4	260.0	306.5

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.