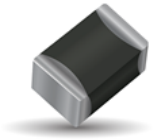
NB12L00153MBD

(0805, 15 kOhm ±20%, 3790K, 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	0805
Operating temperature	-55°C to +150°C
Resistance	15 kOhm
Tolerance on Resistance (25°C)	±20%
B 25/85	3790K±3%
Maximum dissipation at 25°C	0.12 W
Thermal dissipation factor	2 mW/°C
Thermal time constant	5 s
Termination	Ni barrier/100%Sn (for Pb free soldering)

RoHS COMPLIANT

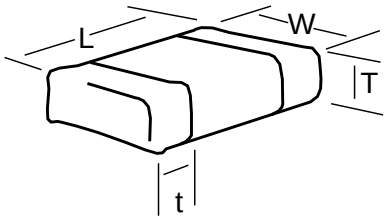
MSL 1
Pb Free
260°C

AEC-Q200
based qualification

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0805	2.0±0.3	1.25±0.2	1.3 max	0.2 min
	(0.079±0.012)	(0.049±0.008)	(0.051) max	(0.008) min



How to Order (Packaging options)

NB	12	L0	0153	M	BD
Type	**Size**	**Material Code**	**Resistance (Ohm)**	**Tolerance**	**Suffix: Packaging**
NB = Ni/Sn Term for lead free soldering	12 = 0805	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

L0 (B25/85 = 3790K±3%)

B25/50	B25/75	B25/85	B25/100	B Tol
3765 K	3784 K	3790 K	3798 K	±3%

T (°C)	R(T) / R25	TF (%)	α (%/°C)	R Min (Ω)	R Nom (Ω)	R Max (Ω)
-55	82.54	22.30	-7.12	714,413	1,238,145	1,761,877
-50	58.03	19.27	-6.87	528,634	870,409	1,212,184
-45	41.31	16.57	-6.63	393,031	619,580	846,130
-40	29.75	14.16	-6.40	293,844	446,317	598,791
-35	21.68	12.03	-6.18	221,029	325,181	429,332
-30	15.97	10.14	-5.98	167,327	239,506	311,686
-25	11.88	8.46	-5.78	127,508	178,241	228,974
-20	8.931	6.99	-5.59	97,815	133,967	170,120
-15	6.777	5.69	-5.40	75,537	101,648	127,759
-10	5.188	4.55	-5.23	58,721	77,827	96,933
-5	4.007	3.56	-5.06	45,946	60,106	74,266
0	3.120	2.70	-4.90	36,182	46,806	57,431
5	2.449	1.96	-4.75	28,672	36,740	44,807
10	1.937	1.33	-4.60	22,860	29,058	35,256
15	1.543	0.80	-4.46	18,335	23,150	27,965
20	1.238	0.36	-4.33	14,791	18,572	22,354
25	1.000	0.00	-4.20	12,000	15,000	18,000
30	0.8128	0.35	-4.07	9,712.0	12,193	14,673
35	0.6648	0.74	-3.95	7,903.8	9,971.9	12,040
40	0.5469	1.17	-3.84	6,466.8	8,203.9	9,941.0
45	0.4525	1.65	-3.73	5,318.3	6,787.7	8,257.2
50	0.3764	2.16	-3.62	4,395.6	5,646.7	6,897.8
55	0.3148	2.69	-3.52	3,650.5	4,722.1	5,793.8
60	0.2646	3.26	-3.42	3,045.7	3,968.8	4,892.0
65	0.2235	3.85	-3.33	2,552.5	3,351.9	4,151.3
70	0.1896	4.46	-3.24	2,148.4	2,844.0	3,539.6
75	0.1616	5.09	-3.15	1,815.9	2,423.9	3,032.0
80	0.1383	5.73	-3.07	1,541.0	2,074.8	2,608.7
85	0.1189	6.39	-2.98	1,312.8	1,783.4	2,254.0
90	0.1026	7.06	-2.91	1,122.5	1,539.0	1,955.4
95	0.0889	7.74	-2.83	963.4	1,333.2	1,703.0
100	0.0773	8.43	-2.76	829.6	1,159.2	1,488.8
105	0.0674	9.13	-2.69	716.9	1,011.5	1,306.2
110	0.0590	9.83	-2.62	621.5	885.7	1,150.0
115	0.0519	10.54	-2.56	540.5	778.2	1,015.8
120	0.0457	11.25	-2.49	471.5	685.8	900.2
125	0.0404	11.97	-2.43	412.5	606.4	800.2
130	0.0358	12.69	-2.37	361.9	537.7	713.4
135	0.0319	13.41	-2.32	318.4	478.2	637.9
140	0.0284	14.13	-2.26	280.9	426.4	571.9
145	0.0254	14.85	-2.21	248.4	381.3	514.2
150	0.0228	15.57	-2.16	220.3	341.9	463.4