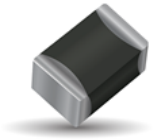
NB12L00153KBD

(0805, 15 kOhm ±10%, 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)	±10%
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

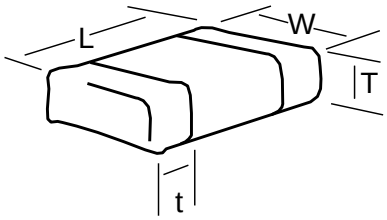
MSL 1
Pb Free
260°C

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 — **Type**
NB = Ni/Sn Term for lead free soldering

12 — **Size**
12 = 0805

L0 — **Material Code**
See Datasheet

0153 — **Resistance (Ohm)**
2 Sig. Digits + Number of Zeros

K — **Tolerance**
H = ±3%*
J = ±5%
K = ±10%
M = ±20%

* For selected PNs

BD — **Suffix: Packaging**
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)

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	838,227	1,238,145	1,638,063
-50	58.03	19.27	-6.87	615,674	870,409	1,125,143
-45	41.31	16.57	-6.63	454,989	619,580	784,172
-40	29.75	14.16	-6.40	338,475	446,317	554,159
-35	21.68	12.03	-6.18	253,547	325,181	396,814
-30	15.97	10.14	-5.98	191,277	239,506	287,735
-25	11.88	8.46	-5.78	145,333	178,241	211,150
-20	8.931	6.99	-5.59	111,212	133,967	156,723
-15	6.777	5.69	-5.40	85,702	101,648	117,594
-10	5.188	4.55	-5.23	66,503	77,827	89,150
-5	4.007	3.56	-5.06	51,957	60,106	68,255
0	3.120	2.70	-4.90	40,862	46,806	52,750
5	2.449	1.96	-4.75	32,346	36,740	41,133
10	1.937	1.33	-4.60	25,766	29,058	32,350
15	1.543	0.80	-4.46	20,650	23,150	25,650
20	1.238	0.36	-4.33	16,649	18,572	20,496
25	1.000	0.00	-4.20	13,500	15,000	16,500
30	0.8128	0.35	-4.07	10,931	12,193	13,454
35	0.6648	0.74	-3.95	8,901.0	9,971.9	11,043
40	0.5469	1.17	-3.84	7,287.1	8,203.9	9,120.6
45	0.4525	1.65	-3.73	5,997.1	6,787.7	7,578.4
50	0.3764	2.16	-3.62	4,960.3	5,646.7	6,333.1
55	0.3148	2.69	-3.52	4,122.7	4,722.1	5,321.6
60	0.2646	3.26	-3.42	3,442.6	3,968.8	4,495.1
65	0.2235	3.85	-3.33	2,887.7	3,351.9	3,816.1
70	0.1896	4.46	-3.24	2,432.8	2,844.0	3,255.2
75	0.1616	5.09	-3.15	2,058.3	2,423.9	2,789.6
80	0.1383	5.73	-3.07	1,748.4	2,074.8	2,401.2
85	0.1189	6.39	-2.98	1,491.1	1,783.4	2,075.6
90	0.1026	7.06	-2.91	1,276.4	1,539.0	1,801.5
95	0.0889	7.74	-2.83	1,096.7	1,333.2	1,569.7
100	0.0773	8.43	-2.76	945.6	1,159.2	1,372.9
105	0.0674	9.13	-2.69	818.1	1,011.5	1,205.0
110	0.0590	9.83	-2.62	710.1	885.7	1,061.4
115	0.0519	10.54	-2.56	618.3	778.2	938.0
120	0.0457	11.25	-2.49	540.1	685.8	831.6
125	0.0404	11.97	-2.43	473.1	606.4	739.6
130	0.0358	12.69	-2.37	415.7	537.7	659.7
135	0.0319	13.41	-2.32	366.2	478.2	590.1
140	0.0284	14.13	-2.26	323.5	426.4	529.3
145	0.0254	14.85	-2.21	286.6	381.3	476.0
150	0.0228	15.57	-2.16	254.5	341.9	429.2