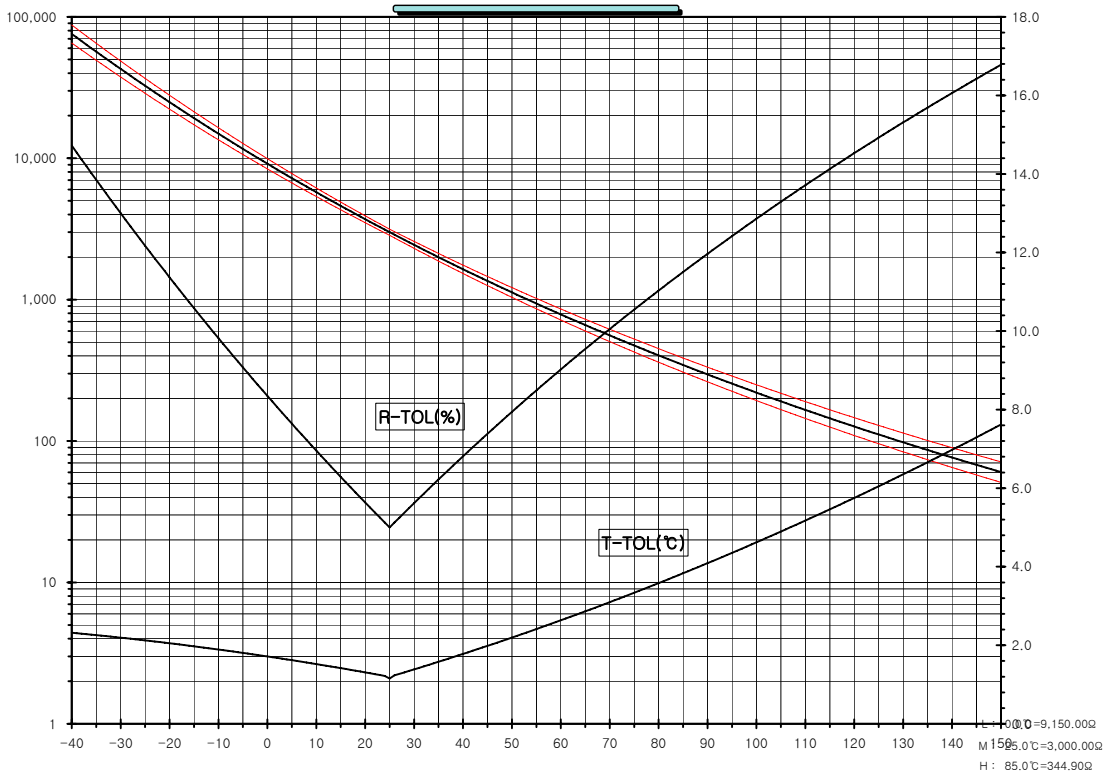
R-T Characteristics & Tolerance

Part Name NTC
Customer N/A
Part No. 302J3 B25/85=3850K
Usage / Remark N/A
Recorder G.S.HAN

Center-Temp / R-Value 25.0℃/3000.00Ω
R-Tolerance of Center-Temp 5.00%
Test Conditon Zero Power
β-Range (25/85)℃
β-Value 3849.7K
β-Tolerance 3.00%



TEMP. (℃)	RESISTANCE (Ω) MIN	CENTER	MAX	RESIST.-TOL. (%) MAX	MIN	TEMP.-TOL. (℃) MAX	MIN
-40.0	65247.17	75664.33	87525.30	15.68	13.77	2.47	2.17
-39.0	61669.72	71391.10	82438.30	15.47	13.62	2.45	2.16
-38.0	58304.15	67377.94	77669.22	15.27	13.47	2.44	2.15
-37.0	55137.13	63608.08	73197.01	15.08	13.32	2.42	2.14
-36.0	52156.23	60065.87	69002.09	14.88	13.17	2.41	2.13
-35.0	49349.80	56736.70	65066.24	14.68	13.02	2.39	2.12
-34.0	46706.99	53606.97	61372.46	14.49	12.87	2.38	2.11
-33.0	44217.62	50663.96	57904.96	14.29	12.72	2.36	2.10
-32.0	41872.22	47895.82	54649.00	14.10	12.58	2.35	2.09
-31.0	39661.89	45291.49	51590.86	13.91	12.43	2.33	2.08
-30.0	37578.33	42840.64	48717.76	13.72	12.28	2.31	2.07
-29.0	35613.79	40533.62	46017.77	13.53	12.14	2.30	2.06
-28.0	33760.99	38361.43	43479.78	13.34	11.99	2.28	2.05
-27.0	32013.14	36315.66	41093.43	13.16	11.85	2.26	2.04
-26.0	30363.88	34388.44	38849.06	12.97	11.70	2.25	2.03
-25.0	28807.26	32572.43	36737.65	12.79	11.56	2.23	2.02
-24.0	27337.69	30860.77	34750.79	12.61	11.42	2.21	2.01
-23.0	25949.97	29247.05	32880.63	12.42	11.27	2.20	1.99
-22.0	24639.19	27725.25	31119.84	12.24	11.13	2.18	1.98
-21.0	23400.79	26289.77	29461.58	12.06	10.99	2.16	1.97

TEMP.	RESISTANCE (Ω)			RESIST.-TOL. (%)		TEMP.-TOL. (℃)	
(℃)	MIN	CENTER	MAX	MAX	MIN	MAX	MIN
-20.0	22230.46	24935.37	27899.46	11.89	10.85	2.14	1.96
-19.0	21124.20	23657.12	26427.52	11.71	10.71	2.13	1.94
-18.0	20078.22	22450.43	25040.16	11.54	10.57	2.11	1.93
-17.0	19089.00	21311.01	23732.19	11.36	10.43	2.09	1.92
-16.0	18153.21	20234.82	22498.72	11.19	10.29	2.07	1.91
-15.0	17267.76	19218.08	21335.21	11.02	10.15	2.05	1.89
-14.0	16429.72	18257.28	20237.40	10.85	10.01	2.04	1.88
-13.0	15636.36	17349.09	19201.30	10.68	9.87	2.02	1.87
-12.0	14885.10	16490.41	18223.17	10.51	9.73	2.00	1.85
-11.0	14173.54	15678.34	17299.54	10.34	9.60	1.98	1.84
-10.0	13499.41	14910.14	16427.14	10.17	9.46	1.96	1.82
-9.0	12860.58	14183.27	15602.90	10.01	9.33	1.94	1.81
-8.0	12255.05	13495.33	14823.97	9.85	9.19	1.92	1.79
-7.0	11680.96	12844.06	14087.66	9.68	9.06	1.90	1.78
-6.0	11136.52	12227.35	13391.46	9.52	8.92	1.88	1.76
-5.0	10620.09	11643.22	12733.01	9.36	8.79	1.86	1.75
-4.0	10130.10	11089.81	12110.10	9.20	8.65	1.84	1.73
-3.0	9665.09	10565.38	11520.66	9.04	8.52	1.82	1.72
-2.0	9223.67	10068.28	10962.75	8.88	8.39	1.80	1.70
-1.0	8804.55	9596.97	10434.55	8.73	8.26	1.78	1.69
0.0	8406.51	9150.00	9934.35	8.57	8.13	1.76	1.67
1.0	8028.39	8726.01	9460.54	8.42	7.99	1.74	1.65
2.0	7669.11	8323.72	9011.61	8.26	7.86	1.72	1.64
3.0	7327.66	7941.92	8586.16	8.11	7.73	1.70	1.62
4.0	7003.06	7579.49	8182.85	7.96	7.61	1.68	1.60
5.0	6694.42	7235.35	7800.43	7.81	7.48	1.66	1.58
6.0	6400.88	6908.50	7437.74	7.66	7.35	1.63	1.57
7.0	6121.63	6598.00	7093.66	7.51	7.22	1.61	1.55
8.0	5855.93	6302.97	6767.17	7.36	7.09	1.59	1.53
9.0	5603.05	6022.55	6457.28	7.22	6.97	1.57	1.51
10.0	5362.32	5755.98	6163.08	7.07	6.84	1.55	1.50
11.0	5133.10	5502.49	5883.72	6.93	6.71	1.52	1.48
12.0	4914.79	5261.40	5618.36	6.78	6.59	1.50	1.46
13.0	4706.83	5032.04	5366.26	6.64	6.46	1.48	1.44
14.0	4508.68	4813.79	5126.69	6.50	6.34	1.46	1.42
15.0	4319.83	4606.06	4898.98	6.36	6.21	1.43	1.40
16.0	4139.82	4408.31	4682.48	6.22	6.09	1.41	1.38
17.0	3968.17	4220.00	4476.59	6.08	5.97	1.39	1.36
18.0	3804.48	4040.65	4280.76	5.94	5.84	1.36	1.34
19.0	3648.33	3869.79	4094.43	5.81	5.72	1.34	1.32
20.0	3499.35	3706.99	3917.12	5.67	5.60	1.32	1.30
21.0	3357.18	3551.82	3748.35	5.53	5.48	1.29	1.28
22.0	3221.47	3403.89	3587.66	5.40	5.36	1.27	1.26
23.0	3091.90	3262.85	3434.63	5.26	5.24	1.25	1.24
24.0	2968.18	3128.32	3288.87	5.13	5.12	1.22	1.22
25.0	2850.00	3000.00	3150.00	5.00	5.00	1.15	1.15
26.0	2730.27	2877.56	3025.22	5.13	5.12	1.24	1.23
27.0	2616.14	2760.71	2905.98	5.26	5.24	1.27	1.27
28.0	2507.33	2649.16	2792.02	5.39	5.35	1.31	1.30
29.0	2403.57	2542.66	2683.08	5.52	5.47	1.35	1.34
30.0	2304.61	2440.96	2578.91	5.65	5.59	1.39	1.38
31.0	2210.19	2343.81	2479.29	5.78	5.70	1.43	1.41
32.0	2120.10	2251.00	2384.00	5.91	5.82	1.47	1.45
33.0	2034.11	2162.30	2292.83	6.04	5.93	1.51	1.49
34.0	1952.02	2077.53	2205.59	6.16	6.04	1.56	1.52
35.0	1873.64	1996.49	2122.08	6.29	6.15	1.60	1.56
36.0	1798.78	1919.00	2042.14	6.42	6.26	1.64	1.60
37.0	1727.27	1844.89	1965.59	6.54	6.38	1.68	1.64
38.0	1658.94	1773.99	1892.28	6.67	6.49	1.72	1.67
39.0	1593.64	1706.16	1822.06	6.79	6.59	1.76	1.71
40.0	1531.23	1641.25	1754.78	6.92	6.70	1.81	1.75
41.0	1471.55	1579.12	1690.30	7.04	6.81	1.85	1.79
42.0	1414.49	1519.63	1628.50	7.16	6.92	1.89	1.83
43.0	1359.91	1462.67	1569.26	7.29	7.03	1.94	1.87
44.0	1307.70	1408.12	1512.45	7.41	7.13	1.98	1.91
45.0	1257.74	1355.86	1457.98	7.53	7.24	2.02	1.94
46.0	1209.92	1305.78	1405.72	7.65	7.34	2.07	1.98
47.0	1164.15	1257.80	1355.58	7.77	7.45	2.11	2.02
48.0	1120.33	1211.81	1307.47	7.89	7.55	2.16	2.06
49.0	1078.36	1167.71	1261.30	8.01	7.65	2.20	2.10

TEMP.	RESISTANCE (Ω)			RESIST.-TOL. (%)		TEMP.-TOL. (℃)	
(℃)	MIN	CENTER	MAX	MAX	MIN	MAX	MIN
50.0	1038.17	1125.43	1216.98	8.13	7.75	2.25	2.14
51.0	999.66	1084.88	1174.42	8.25	7.86	2.29	2.18
52.0	962.77	1045.98	1133.55	8.37	7.96	2.34	2.22
53.0	927.40	1008.66	1094.30	8.49	8.06	2.39	2.26
54.0	893.51	972.85	1056.59	8.61	8.16	2.43	2.30
55.0	861.01	938.48	1020.36	8.73	8.25	2.48	2.35
56.0	829.85	905.48	985.55	8.84	8.35	2.53	2.39
57.0	799.96	873.80	952.08	8.96	8.45	2.57	2.43
58.0	771.28	843.38	919.91	9.07	8.55	2.62	2.47
59.0	743.77	814.16	888.98	9.19	8.65	2.67	2.51
60.0	717.37	786.09	859.23	9.30	8.74	2.72	2.55
61.0	692.03	759.11	830.61	9.42	8.84	2.77	2.59
62.0	667.70	733.19	803.09	9.53	8.93	2.81	2.64
63.0	644.34	708.27	776.60	9.65	9.03	2.86	2.68
64.0	621.91	684.32	751.11	9.76	9.12	2.91	2.72
65.0	600.36	661.29	726.58	9.87	9.21	2.96	2.76
66.0	579.66	639.14	702.96	9.99	9.31	3.01	2.81
67.0	559.77	617.84	680.22	10.10	9.40	3.06	2.85
68.0	540.65	597.34	658.32	10.21	9.49	3.11	2.89
69.0	522.28	577.62	637.23	10.32	9.58	3.16	2.94
70.0	504.61	558.64	616.91	10.43	9.67	3.21	2.98
71.0	487.62	540.37	597.33	10.54	9.76	3.27	3.02
72.0	471.28	522.79	578.46	10.65	9.85	3.32	3.07
73.0	455.57	505.85	560.28	10.76	9.94	3.37	3.11
74.0	440.45	489.55	542.75	10.87	10.03	3.42	3.16
75.0	425.90	473.84	525.86	10.98	10.12	3.47	3.20
76.0	411.90	458.71	509.56	11.09	10.20	3.53	3.25
77.0	398.43	444.13	493.84	11.19	10.29	3.58	3.29
78.0	385.45	430.08	478.69	11.30	10.38	3.63	3.33
79.0	372.96	416.55	464.06	11.41	10.46	3.68	3.38
80.0	360.93	403.49	449.95	11.51	10.55	3.74	3.43
81.0	349.34	390.91	436.33	11.62	10.63	3.79	3.47
82.0	338.18	378.78	423.19	11.73	10.72	3.85	3.52
83.0	327.42	367.08	410.50	11.83	10.80	3.90	3.56
84.0	317.06	355.79	398.25	11.94	10.89	3.96	3.61
85.0	307.07	344.90	386.43	12.04	10.97	4.01	3.65
86.0	297.44	334.39	375.00	12.14	11.05	4.07	3.70
87.0	288.15	324.25	363.97	12.25	11.13	4.12	3.75
88.0	279.20	314.47	353.31	12.35	11.22	4.18	3.79
89.0	270.56	305.02	343.01	12.45	11.30	4.23	3.84
90.0	262.24	295.90	333.06	12.56	11.38	4.29	3.89
91.0	254.20	287.10	323.44	12.66	11.46	4.35	3.94
92.0	246.45	278.59	314.14	12.76	11.54	4.41	3.98
93.0	238.97	270.38	305.15	12.86	11.62	4.46	4.03
94.0	231.74	262.44	296.46	12.96	11.70	4.52	4.08
95.0	224.77	254.77	288.05	13.06	11.77	4.58	4.13
96.0	218.04	247.36	279.92	13.16	11.85	4.64	4.18
97.0	211.54	240.20	272.06	13.26	11.93	4.70	4.22
98.0	205.27	233.28	264.45	13.36	12.01	4.75	4.27
99.0	199.21	226.59	257.09	13.46	12.08	4.81	4.32
100.0	193.35	220.12	249.96	13.56	12.16	4.87	4.37
101.0	187.69	213.86	243.07	13.66	12.24	4.93	4.42
102.0	182.22	207.81	236.39	13.76	12.31	4.99	4.47
103.0	176.94	201.96	229.93	13.85	12.39	5.05	4.52
104.0	171.83	196.29	223.68	13.95	12.46	5.11	4.57
105.0	166.89	190.81	217.62	14.05	12.54	5.17	4.62
106.0	162.12	185.51	211.75	14.14	12.61	5.23	4.67
107.0	157.50	180.38	206.07	14.24	12.68	5.30	4.72
108.0	153.04	175.41	200.56	14.34	12.76	5.36	4.77
109.0	148.72	170.60	195.22	14.43	12.83	5.42	4.82
110.0	144.54	165.95	190.05	14.53	12.90	5.48	4.87
111.0	140.49	161.44	185.04	14.62	12.97	5.54	4.92
112.0	136.58	157.07	180.19	14.71	13.05	5.61	4.97
113.0	132.80	152.84	175.48	14.81	13.12	5.67	5.02
114.0	129.13	148.75	170.91	14.90	13.19	5.73	5.07
115.0	125.58	144.78	166.49	15.00	13.26	5.80	5.12
116.0	122.15	140.93	162.19	15.09	13.33	5.86	5.18
117.0	118.82	137.20	158.03	15.18	13.40	5.92	5.23
118.0	115.60	133.59	153.99	15.27	13.47	5.99	5.28
119.0	112.48	130.09	150.08	15.37	13.54	6.05	5.33

TEMP. (℃)	RESISTANCE (Ω) MIN	CENTER	MAX	RESIST.-TOL. (%) MAX	MIN	TEMP.-TOL. (℃) MAX	MIN
120.0	109.46	126.69	146.27	15.46	13.60	6.12	5.39
121.0	106.53	123.40	142.59	15.55	13.67	6.18	5.44
122.0	103.69	120.21	139.01	15.64	13.74	6.25	5.49
123.0	100.94	117.11	135.53	15.73	13.81	6.32	5.54
124.0	98.27	114.11	132.16	15.82	13.87	6.38	5.60
125.0	95.69	111.19	128.88	15.91	13.94	6.45	5.65
126.0	93.19	108.37	125.70	16.00	14.01	6.51	5.70
127.0	90.76	105.62	122.62	16.09	14.07	6.58	5.76
128.0	88.40	102.96	119.62	16.18	14.14	6.65	5.81
129.0	86.12	100.38	116.71	16.27	14.21	6.72	5.87
130.0	83.90	97.87	113.88	16.35	14.27	6.78	5.92
131.0	81.75	95.43	111.13	16.44	14.34	6.85	5.97
132.0	79.67	93.07	108.46	16.53	14.40	6.92	6.03
133.0	77.65	90.78	105.86	16.62	14.46	6.99	6.08
134.0	75.68	88.55	103.34	16.70	14.53	7.06	6.14
135.0	73.78	86.38	100.89	16.79	14.59	7.13	6.19
136.0	71.93	84.28	98.50	16.88	14.65	7.20	6.25
137.0	70.13	82.24	96.19	16.96	14.72	7.27	6.30
138.0	68.39	80.25	93.93	17.05	14.78	7.34	6.36
139.0	66.70	78.32	91.74	17.13	14.84	7.41	6.42
140.0	65.05	76.45	89.61	17.22	14.90	7.48	6.47
141.0	63.46	74.63	87.54	17.30	14.97	7.55	6.53
142.0	61.91	72.86	85.52	17.39	15.03	7.62	6.58
143.0	60.40	71.13	83.56	17.47	15.09	7.69	6.64
144.0	58.94	69.46	81.66	17.56	15.15	7.76	6.70
145.0	57.52	67.83	79.80	17.64	15.21	7.84	6.75
146.0	56.14	66.25	77.99	17.72	15.27	7.91	6.81
147.0	54.79	64.71	76.24	17.81	15.33	7.98	6.87
148.0	53.49	63.21	74.52	17.89	15.39	8.05	6.93
149.0	52.22	61.76	72.86	17.97	15.45	8.13	6.98
150.0	50.99	60.34	71.24	18.06	15.51	8.20	7.04