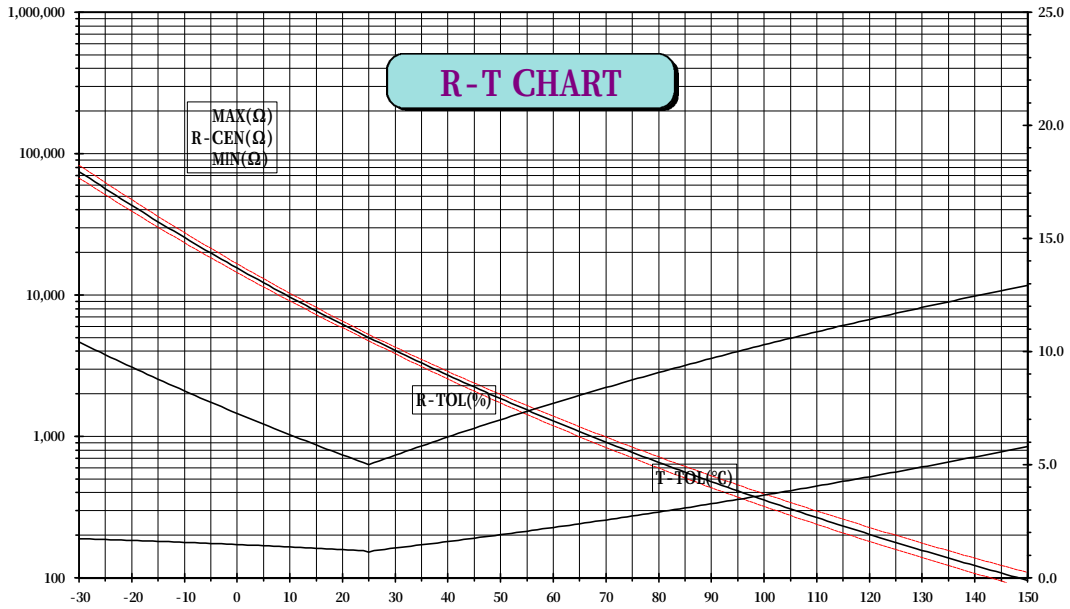
R-T Characteristics & Tolerance

Part Name	NTC
Customer	N/A
Part No.	502J3 (D5K)
Usage / Remark	N/A
Recorder	G. S. HAN
Center-Temp / R-Value	25.0℃/5000.00Ω
R-Tolerance of Center-Temp	5.00%
Test Conditon	Zero Power
β-Range	(25/85)℃
β-Value	3900.1K
β-Tolerance	2.00%



L : 0.0℃=15,517.00Ω
M : 25.0℃=5,000.00Ω
H : 85.0℃=558.80Ω

TEMP. (℃)	RESISTANCE (Ω) MIN	CENTER	MAX	RESIST.-TOL. (%) MAX	MIN	TEMP.-TOL. (℃) MAX	MIN
-30.0	67262.12	74737.46	82835.98	10.84	10.00	1.80	1.66
-29.0	63640.65	70633.68	78199.13	10.71	9.90	1.79	1.65
-28.0	60231.28	66774.61	73843.70	10.59	9.80	1.78	1.65
-27.0	57020.75	63144.66	69751.45	10.46	9.70	1.77	1.64
-26.0	53996.62	59729.28	65905.39	10.34	9.60	1.76	1.64
-25.0	51147.30	56514.90	62289.68	10.22	9.50	1.75	1.63
-24.0	48461.95	53488.84	58889.56	10.10	9.40	1.74	1.62
-23.0	45930.47	50639.29	55691.29	9.98	9.30	1.74	1.62
-22.0	43543.38	47955.21	52682.02	9.86	9.20	1.73	1.61
-21.0	41291.84	45426.30	49849.80	9.74	9.10	1.72	1.60
-20.0	39167.58	43042.93	47183.45	9.62	9.00	1.71	1.60
-19.0	37162.87	40796.10	44672.57	9.50	8.91	1.70	1.59
-18.0	35270.47	38677.41	42307.41	9.39	8.81	1.69	1.58
-17.0	33483.61	36679.01	40078.91	9.27	8.71	1.68	1.58
-16.0	31795.95	34793.55	37978.57	9.15	8.62	1.67	1.57
-15.0	30201.56	33014.17	35998.49	9.04	8.52	1.66	1.56
-14.0	28694.89	31334.44	34131.26	8.93	8.42	1.65	1.56
-13.0	27270.72	29748.35	32369.95	8.81	8.33	1.64	1.55
-12.0	25924.19	28250.27	30708.10	8.70	8.23	1.63	1.54
-11.0	24650.73	26834.95	29139.67	8.59	8.14	1.62	1.53
-10.0	23446.05	25497.44	27659.00	8.48	8.05	1.61	1.53
-9.0	22306.15	24233.14	26260.79	8.37	7.95	1.60	1.52

TEMP. (°C)	RESISTANCE (Ω) MIN	CENTER	MAX	RESIST.-TOL. (%) MAX	MIN	TEMP.-TOL. (°C) MAX	MIN
-8.0	21227.25	23037.72	24940.10	8.26	7.86	1.59	1.51
-7.0	20205.83	21907.12	23692.29	8.15	7.77	1.58	1.50
-6.0	19238.57	20837.55	22513.01	8.04	7.67	1.56	1.49
-5.0	18322.36	19825.45	21398.20	7.93	7.58	1.55	1.48
-4.0	17454.30	18867.47	20344.07	7.83	7.49	1.54	1.48
-3.0	16631.62	17960.48	19347.03	7.72	7.40	1.53	1.47
-2.0	15851.77	17101.55	18403.74	7.61	7.31	1.52	1.46
-1.0	15112.33	16287.92	17511.08	7.51	7.22	1.51	1.45
0.0	14411.02	15517.00	16666.09	7.41	7.13	1.50	1.44
1.0	13745.70	14786.36	15866.03	7.30	7.04	1.49	1.43
2.0	13114.39	14093.71	15108.31	7.20	6.95	1.47	1.42
3.0	12515.17	13436.93	14390.50	7.10	6.86	1.46	1.41
4.0	11946.29	12813.97	13710.32	7.00	6.77	1.45	1.40
5.0	11406.08	12222.97	13065.63	6.89	6.68	1.44	1.40
6.0	10892.95	11662.13	12454.42	6.79	6.60	1.43	1.39
7.0	10405.44	11129.79	11874.81	6.69	6.51	1.41	1.38
8.0	9942.14	10624.37	11325.02	6.59	6.42	1.40	1.37
9.0	9501.76	10144.38	10803.39	6.50	6.33	1.39	1.36
10.0	9083.06	9688.45	10308.35	6.40	6.25	1.38	1.35
11.0	8684.87	9255.25	9838.43	6.30	6.16	1.37	1.34
12.0	8306.09	8843.54	9392.23	6.20	6.08	1.35	1.33
13.0	7945.70	8452.18	8968.46	6.11	5.99	1.34	1.31
14.0	7602.73	8080.06	8565.90	6.01	5.91	1.33	1.30
15.0	7276.24	7726.15	8183.38	5.92	5.82	1.31	1.29
16.0	6965.38	7389.48	7819.81	5.82	5.74	1.30	1.28
17.0	6669.33	7069.14	7474.19	5.73	5.66	1.29	1.27
18.0	6387.32	6764.26	7145.53	5.64	5.57	1.27	1.26
19.0	6118.62	6474.02	6832.93	5.54	5.49	1.26	1.25
20.0	5862.54	6197.65	6535.54	5.45	5.41	1.25	1.24
21.0	5618.44	5934.44	6252.56	5.36	5.32	1.23	1.23
22.0	5385.69	5683.70	5983.20	5.27	5.24	1.22	1.21
23.0	5163.73	5444.78	5726.77	5.18	5.16	1.21	1.20
24.0	4952.01	5217.07	5482.58	5.09	5.08	1.19	1.19
25.0	4750.00	5000.00	5250.00	5.00	5.00	1.14	1.14
26.0	4549.52	4793.02	5036.93	5.09	5.08	1.21	1.21
27.0	4358.48	4595.62	4833.55	5.18	5.16	1.24	1.23
28.0	4176.39	4407.31	4639.37	5.27	5.24	1.26	1.26
29.0	4002.80	4227.64	4453.94	5.35	5.32	1.29	1.28
30.0	3837.27	4056.17	4276.83	5.44	5.40	1.32	1.31
31.0	3679.39	3892.48	4107.63	5.53	5.47	1.35	1.34
32.0	3528.77	3736.20	3945.94	5.61	5.55	1.38	1.37
33.0	3385.04	3586.95	3791.40	5.70	5.63	1.41	1.39
34.0	3247.87	3444.39	3643.67	5.79	5.71	1.44	1.42
35.0	3116.92	3308.19	3502.41	5.87	5.78	1.47	1.45
36.0	2991.89	3178.03	3367.31	5.96	5.86	1.50	1.47
37.0	2872.47	3053.62	3238.08	6.04	5.93	1.53	1.50
38.0	2758.40	2934.69	3114.44	6.12	6.01	1.56	1.53
39.0	2649.41	2820.96	2996.11	6.21	6.08	1.59	1.56
40.0	2545.25	2712.19	2882.85	6.29	6.16	1.62	1.59
41.0	2445.69	2608.14	2774.43	6.38	6.23	1.65	1.61
42.0	2350.50	2508.58	2670.60	6.46	6.30	1.68	1.64
43.0	2259.48	2413.30	2571.15	6.54	6.37	1.71	1.67
44.0	2172.41	2322.10	2475.89	6.62	6.45	1.75	1.70
45.0	2089.12	2234.78	2384.62	6.70	6.52	1.78	1.73
46.0	2009.43	2151.17	2297.15	6.79	6.59	1.81	1.76
47.0	1933.15	2071.08	2213.31	6.87	6.66	1.84	1.79
48.0	1860.13	1994.36	2132.93	6.95	6.73	1.87	1.81
49.0	1790.22	1920.85	2055.85	7.03	6.80	1.91	1.84
50.0	1723.28	1850.40	1981.93	7.11	6.87	1.94	1.87
51.0	1659.15	1782.87	1911.02	7.19	6.94	1.97	1.90
52.0	1597.71	1718.12	1842.98	7.27	7.01	2.00	1.93
53.0	1538.85	1656.04	1777.69	7.35	7.08	2.04	1.96
54.0	1482.43	1596.49	1715.03	7.43	7.14	2.07	1.99
55.0	1428.35	1539.37	1654.87	7.50	7.21	2.10	2.02
56.0	1376.49	1484.56	1597.11	7.58	7.28	2.14	2.05
57.0	1326.77	1431.96	1541.64	7.66	7.35	2.17	2.08
58.0	1279.07	1381.48	1488.35	7.74	7.41	2.20	2.11
59.0	1233.32	1333.01	1437.16	7.81	7.48	2.24	2.14
60.0	1189.41	1286.47	1387.97	7.89	7.54	2.27	2.17
61.0	1147.28	1241.78	1340.70	7.97	7.61	2.31	2.20
62.0	1106.84	1198.85	1295.26	8.04	7.67	2.34	2.24

TEMP. (℃)	RESISTANCE (Ω) MIN	CENTER	MAX	RESIST.-TOL. (%) MAX	MIN	TEMP.-TOL. (℃) MAX	MIN
63.0	1068.01	1157.61	1251.58	8.12	7.74	2.38	2.27
64.0	1030.73	1117.97	1209.57	8.19	7.80	2.41	2.30
65.0	994.92	1079.88	1169.17	8.27	7.87	2.45	2.33
66.0	960.53	1043.27	1130.31	8.34	7.93	2.48	2.36
67.0	927.48	1008.07	1092.92	8.42	7.99	2.52	2.39
68.0	895.73	974.22	1056.95	8.49	8.06	2.55	2.42
69.0	865.21	941.67	1022.32	8.57	8.12	2.59	2.46
70.0	835.87	910.35	989.00	8.64	8.18	2.63	2.49
71.0	807.66	880.23	956.91	8.71	8.24	2.66	2.52
72.0	780.54	851.23	926.01	8.78	8.31	2.70	2.55
73.0	754.45	823.33	896.26	8.86	8.37	2.74	2.58
74.0	729.36	796.48	867.60	8.93	8.43	2.77	2.62
75.0	705.21	770.62	839.98	9.00	8.49	2.81	2.65
76.0	681.98	745.72	813.38	9.07	8.55	2.85	2.68
77.0	659.62	721.74	787.74	9.14	8.61	2.89	2.72
78.0	638.09	698.64	763.02	9.22	8.67	2.92	2.75
79.0	617.37	676.39	739.20	9.29	8.73	2.96	2.78
80.0	597.41	654.95	716.23	9.36	8.78	3.00	2.82
81.0	578.19	634.28	694.08	9.43	8.84	3.04	2.85
82.0	559.68	614.37	672.71	9.50	8.90	3.08	2.88
83.0	541.84	595.17	652.10	9.57	8.96	3.11	2.92
84.0	524.66	576.65	632.21	9.64	9.02	3.15	2.95
85.0	508.10	558.80	613.03	9.70	9.07	3.19	2.98
86.0	492.13	541.58	594.51	9.77	9.13	3.23	3.02
87.0	476.74	524.97	576.64	9.84	9.19	3.27	3.05
88.0	461.90	508.95	559.38	9.91	9.24	3.31	3.09
89.0	447.59	493.48	542.72	9.98	9.30	3.35	3.12
90.0	433.79	478.56	526.63	10.04	9.36	3.39	3.16
91.0	420.47	464.15	511.09	10.11	9.41	3.43	3.19
92.0	407.63	450.25	496.08	10.18	9.47	3.47	3.23
93.0	395.23	436.82	481.58	10.25	9.52	3.51	3.26
94.0	383.27	423.85	467.56	10.31	9.57	3.55	3.30
95.0	371.72	411.33	454.02	10.38	9.63	3.59	3.33
96.0	360.58	399.23	440.93	10.44	9.68	3.63	3.37
97.0	349.81	387.55	428.28	10.51	9.74	3.67	3.40
98.0	339.42	376.25	416.04	10.58	9.79	3.71	3.44
99.0	329.38	365.34	404.21	10.64	9.84	3.76	3.48
100.0	319.68	354.79	392.77	10.71	9.90	3.80	3.51
101.0	310.31	344.59	381.71	10.77	9.95	3.84	3.55
102.0	301.26	334.74	371.00	10.83	10.00	3.88	3.58
103.0	292.51	325.20	360.65	10.90	10.05	3.92	3.62
104.0	284.06	315.98	350.62	10.96	10.10	3.97	3.66
105.0	275.88	307.07	340.92	11.03	10.16	4.01	3.69
106.0	267.98	298.44	331.54	11.09	10.21	4.05	3.73
107.0	260.34	290.10	322.45	11.15	10.26	4.10	3.77
108.0	252.95	282.02	313.65	11.21	10.31	4.14	3.80
109.0	245.80	274.21	305.13	11.28	10.36	4.18	3.84
110.0	238.89	266.64	296.88	11.34	10.41	4.23	3.88
111.0	232.20	259.32	288.88	11.40	10.46	4.27	3.92
112.0	225.72	252.23	281.14	11.46	10.51	4.31	3.95
113.0	219.46	245.36	273.64	11.53	10.56	4.36	3.99
114.0	213.39	238.72	266.37	11.59	10.61	4.40	4.03
115.0	207.52	232.28	259.33	11.65	10.66	4.45	4.07
116.0	201.84	226.04	252.50	11.71	10.70	4.49	4.11
117.0	196.34	220.00	245.89	11.77	10.75	4.54	4.14
118.0	191.01	214.14	239.47	11.83	10.80	4.58	4.18
119.0	185.85	208.47	233.25	11.89	10.85	4.63	4.22
120.0	180.85	202.97	227.22	11.95	10.90	4.67	4.26
121.0	176.01	197.64	221.37	12.01	10.94	4.72	4.30
122.0	171.31	192.47	215.70	12.07	10.99	4.76	4.34
123.0	166.77	187.46	210.19	12.13	11.04	4.81	4.38
124.0	162.36	182.60	204.85	12.19	11.09	4.86	4.42
125.0	158.09	177.89	199.67	12.24	11.13	4.90	4.46
126.0	153.95	173.32	194.64	12.30	11.18	4.95	4.50
127.0	149.93	168.89	189.76	12.36	11.22	4.99	4.54
128.0	146.04	164.59	185.03	12.42	11.27	5.04	4.57
129.0	142.26	160.41	180.43	12.48	11.32	5.09	4.61
130.0	138.60	156.36	175.96	12.53	11.36	5.14	4.65
131.0	135.05	152.43	171.63	12.59	11.41	5.18	4.70
132.0	131.60	148.62	167.42	12.65	11.45	5.23	4.74
133.0	128.26	144.92	163.33	12.71	11.50	5.28	4.78

TEMP. (℃)	RESISTANCE (Ω) MIN	CENTER	MAX	RESIST.-TOL. (%) MAX	MIN	TEMP.-TOL. (℃) MAX	MIN
134.0	125.01	141.32	159.36	12.76	11.54	5.33	4.82
135.0	121.86	137.83	155.50	12.82	11.58	5.38	4.86
136.0	118.81	134.44	151.75	12.88	11.63	5.42	4.90
137.0	115.84	131.15	148.11	12.93	11.67	5.47	4.94
138.0	112.96	127.95	144.57	12.99	11.72	5.52	4.98
139.0	110.16	124.84	141.13	13.04	11.76	5.57	5.02
140.0	107.45	121.83	137.78	13.10	11.80	5.62	5.06
141.0	104.81	118.89	134.53	13.15	11.84	5.67	5.10
142.0	102.25	116.04	131.37	13.21	11.89	5.72	5.15
143.0	99.76	113.27	128.30	13.26	11.93	5.77	5.19
144.0	97.34	110.58	125.31	13.32	11.97	5.82	5.23
145.0	94.99	107.97	122.40	13.37	12.01	5.87	5.27
146.0	92.71	105.42	119.57	13.43	12.06	5.92	5.31
147.0	90.49	102.95	116.82	13.48	12.10	5.97	5.36
148.0	88.34	100.54	114.15	13.53	12.14	6.02	5.40
149.0	86.24	98.20	111.55	13.59	12.18	6.07	5.44
150.0	84.20	95.93	109.01	13.64	12.22	6.12	5.48