55031 Precision Glass NTC Thermistor



- **Excellent Long Term Stability**
- **Glass Hermetic Seal**
- **Use up to 200°C**
- **10,000 ohm Resistance @ 25°C**
- **Interchangeable ±0.1°C, 0°C to 70°C,**
- **Pressed Disk Ceramic Sensor**
- **High sensitivity**
- **0.095″ (2.4 mm) Maximum Diameter**
- **32 AWG, 2.5″ (6.4 cm) long Gold Plated Dumet leads**
- **RoHS Compliant**

DESCRIPTION

Moisture-proof Hermetic Glass Encapsulated Precision Interchangeable NTC Thermistor utilizing high stability pressed-disk ceramic sensor for general applications.

FEATURES

- Glass Hermetic Seal
- 10,000 Ohm Resistance @ 25°C
- 0.095″ (2.4 mm) Maximum Diameter
- Interchangeability
- Excellent High Temperature Performance
- Excellent Long Term Stability
- High Sensitivity
- RoHS Compliance

APPLICATIONS

- High Moisture Applications
- Low to Mid Range Temperature Applications
- Drop in Replacement for 44000 Series Epoxy
- Tight Tolerance Instrumentation
- Use up to 200°C
- Applications Requiring Improved Stability
- Applications Requiring Sensing Small Changes in Temperature
- Allows use in Applications World-wide

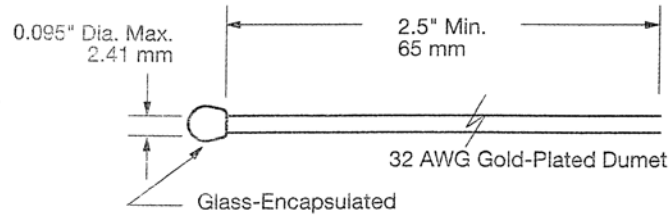
PERFORMANCE SPECS

Parameter	Units	Value
Resistance @ 25°C	Ohms	10,000
Tolerance 0°C to 70°C	°C	± 0.1
Beta Value 25/85	K	3694
Tolerance on Beta Value	%	0.4
Time response in air	Seconds	< 15
Dissipation Constant in air	mW/°C	1.5
Insulation Resistance (Min. of 100Mohms for 1 Sec.)	Volts	500

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MECHANICAL DETAILS



RESISTANCE V TEMPERATURE TABLE

Temp °C	K-Ohms
-55	607.800
-54	569.600
-53	534.100
-52	501.000
-51	470.100
-50	441.300
-49	414.500
-48	389.400
-47	366.000
-46	344.100
-45	323.700
-44	304.600
-43	286.700
-42	270.000
-41	254.400
-40	239.800
-39	226.000
-38	213.200
-37	201.100
-36	189.800
-35	179.200
-34	169.300
-33	160.000
-32	151.200
-31	143.000
-30	135.200
-29	127.900
-28	121.100
-27	114.600
-26	108.600
-25	102.900
-24	97.490
-23	92.430
-22	87.660
-21	83.160
-20	78.910
-19	74.910
-18	71.130
-17	67.570
-16	64.200

Temp °C	K-Ohms
-15	61.020
-14	58.010
-13	55.170
-12	52.480
-11	49.940
-10	47.540
-9	45.270
-8	43.110
-7	41.070
-6	39.140
-5	37.310
-4	35.570
-3	33.930
-2	32.370
-1	30.890
0	29.490
1	28.150
2	26.890
3	25.690
4	24.550
5	23.460
6	22.430
7	21.450
8	20.520
9	19.630
10	18.790
11	17.980
12	17.220
13	16.490
14	15.790
15	15.130
16	14.500
17	13.900
18	13.330
19	12.790
20	12.260
21	11.770
22	11.290
23	10.840
24	10.410

Temp °C	K-Ohms
25	10.000
26	9.605
27	9.227
28	8.867
29	8.523
30	8.194
31	7.880
32	7.579
33	7.291
34	7.016
35	6.752
36	6.500
37	6.258
38	6.026
39	5.805
40	5.592
41	5.389
42	5.193
43	5.006
44	4.827
45	4.655
46	4.489
47	4.331
48	4.179
49	4.033
50	3.893
51	3.758
52	3.629
53	3.504
54	3.385
55	3.270
56	3.160
57	3.054
58	2.952
59	2.854
60	2.760
61	2.669
62	2.582
63	2.497
64	2.417

Temp °C	K-Ohms
65	2.3390
66	2.2640
67	2.1910
68	2.1220
69	2.0550
70	1.9900
71	1.9280
72	1.8680
73	1.8100
74	1.7540
75	1.7000
76	1.6480
77	1.5980
78	1.5490
79	1.5030
80	1.4580
81	1.4140
82	1.3720
83	1.3320
84	1.2930
85	1.2550
86	1.2180
87	1.1830
88	1.1490
89	1.1160
90	1.0840
91	1.0530
92	1.0230
93	0.9942
94	0.9663
95	0.9393
96	0.9132
97	0.8879
98	0.8634
99	0.8397
100	0.8168
101	0.7946
102	0.7731
103	0.7523
104	0.7321

Temp °C	K-Ohms
105	0.7126
106	0.6936
107	0.6753
108	0.6575
109	0.6403
110	0.6235
111	0.6073
112	0.5916
113	0.5764
114	0.5616
115	0.5473
116	0.5334
117	0.5199
118	0.5068
119	0.4941
120	0.4818
121	0.4698
122	0.4582
123	0.4469
124	0.4359
125	0.4253
126	0.4149
127	0.4049
128	0.3951
129	0.3856
130	0.3764
131	0.3674
132	0.3587
133	0.3503
134	0.3420
135	0.3340
136	0.3263
137	0.3187
138	0.3113
139	0.3042
140	0.2972
141	0.2904
142	0.2838
143	0.2774
144	0.2712
145	0.2651
146	0.2592
147	0.2534
148	0.2478
149	0.2423
150	0.2370

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ORDERING INFORMATION

Part Number	Description	Ω @25ºC	MOQ
055110	55031 GEM THERM	10,000	200
055310	55031-BP (100 PCS) GEM THERM	10,000	200

* For quantities less than Minimum Order Quantity – contact distribution

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