

# 55033 Precision Glass NTC Thermistor



- Excellent Long Term Stability
- Glass Hermetic Seal
- Use up to 200°C
- 2252 ohm Resistance @ 25°C
- Interchangeable  $\pm 0.1^\circ\text{C}$ , 0°C to 70°C
- Medical '400 Series' compatible
- 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
- 2252 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

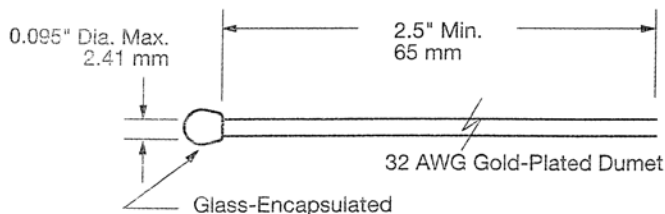
- High Moisture Applications
- Medical Instrumentation, Low to Mid range temperatures
- Drop in Replacement for 44000 Series Epoxy
- Tight Tolerance Instrumentation
- Use up to 200°C
- Applications Requiring Improved Stability
- Applications Requiring Sensing Small Changes in Temperature
- Allows use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

## PERFORMANCE SPECS

Parameter	Units	Value
Resistance @ 25°C	Ohms	2252
Tolerance 0°C to 70°C	°C	$\pm 0.1$
Beta Value 25/85	K	3978
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	Temp °C	K-Ohms	Temp °C	K-Ohms	Temp °C	K-Ohms	Temp °C	K-Ohms
-55	217.100	-15	16.430	25	2.252	65	0.4690	105	0.1323
-54	201.700	-14	15.540	26	2.156	66	0.4529	106	0.1286
-53	187.400	-13	14.700	27	2.064	67	0.4374	107	0.1250
-52	174.300	-12	13.910	28	1.977	68	0.4225	108	0.1216
-51	162.200	-11	13.160	29	1.894	69	0.4082	109	0.1182
-50	151.000	-10	12.460	30	1.815	70	0.3945	110	0.1150
-49	140.600	-9	11.810	31	1.739	71	0.3812	111	0.1118
-48	131.000	-8	11.190	32	1.667	72	0.3685	112	0.1088
-47	122.100	-7	10.600	33	1.599	73	0.3562	113	0.1058
-46	113.900	-6	10.050	34	1.533	74	0.3445	114	0.1030
-45	106.300	-5	9.534	35	1.471	75	0.3331	115	0.1002
-44	99.260	-4	9.046	36	1.412	76	0.3223	116	0.0976
-43	92.720	-3	8.586	37	1.355	77	0.3118	117	0.0950
-42	86.650	-2	8.151	38	1.301	78	0.3017	118	0.0925
-41	81.020	-1	7.741	39	1.249	79	0.2920	119	0.0900
-40	75.790	0	7.355	40	1.200	80	0.2827	120	0.0877
-39	70.930	1	6.989	41	1.152	81	0.2737	121	0.0854
-38	66.410	2	6.644	42	1.107	82	0.2650	122	0.0832
-37	62.210	3	6.319	43	1.064	83	0.2567	123	0.0811
-36	58.300	4	6.011	44	1.023	84	0.2486	124	0.0790
-35	54.660	5	5.719	45	0.9838	85	0.2409	125	0.0770
-34	51.270	6	5.444	46	0.9462	86	0.2334	126	0.0750
-33	48.110	7	5.183	47	0.9102	87	0.2262	127	0.0731
-32	45.170	8	4.937	48	0.8758	88	0.2193	128	0.0713
-31	42.420	9	4.703	49	0.8428	89	0.2126	129	0.0695
-30	39.860	10	4.482	50	0.8113	90	0.2061	130	0.0678
-29	37.470	11	4.273	51	0.7811	91	0.1999	131	0.0661
-28	35.240	12	4.074	52	0.7522	92	0.1939	132	0.0644
-27	33.150	13	3.886	53	0.7245	93	0.1881	133	0.0629
-26	31.200	14	3.708	54	0.6979	94	0.1825	134	0.0613
-25	29.380	15	3.539	55	0.6725	95	0.1771	135	0.0598
-24	27.670	16	3.378	56	0.6481	96	0.1719	136	0.0584
-23	26.070	17	3.226	57	0.6248	97	0.1669	137	0.0570
-22	24.580	18	3.081	58	0.6024	98	0.1620	138	0.0556
-21	23.180	19	2.944	59	0.5809	99	0.1573	139	0.0543
-20	21.870	20	2.814	60	0.5603	100	0.1528	140	0.0530
-19	20.640	21	2.690	61	0.5405	101	0.1484	141	0.0517
-18	19.480	22	2.572	62	0.5215	102	0.1442	142	0.0505
-17	18.400	23	2.460	63	0.5033	103	0.1401	143	0.0493
-16	17.390	24	2.354	64	0.4858	104	0.1361	144	0.0482
								145	0.0470
								146	0.0459
								147	0.0449
								148	0.0438
								149	0.0428
								150	0.0418

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## ORDERING INFORMATION

Part Number	Description	$\Omega$ @25°C	MOQ
055112	55033 GEM THERM	2252	200
055312	55033-BP (100 PCS) GEM THERM	2252	200

\* For quantities less than Minimum Order Quantity – contact distribution

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