

DO-35 Series Thermistor – 200KF4000DPGN



- PCB Mounting
- Hermetically sealed elements, glass encapsulation
- Axial Leads
- High temperature devices for applications to +250°C
- RoHS Compliant

DESCRIPTION

The NTC Chip hermetically sealed in a glass (DO-35 diode style) package.

FEATURES

- Hermetically sealed glass package
- Proven Stability and Reliability
- 24AWG Nickel Plated Copper Leads
- Low cost
- Temperature range -40 °C to +250 °C

APPLICATIONS

- Low cost probe assemblies
- Consumer electronics
- PCB temperature sensing
- Air conditioning

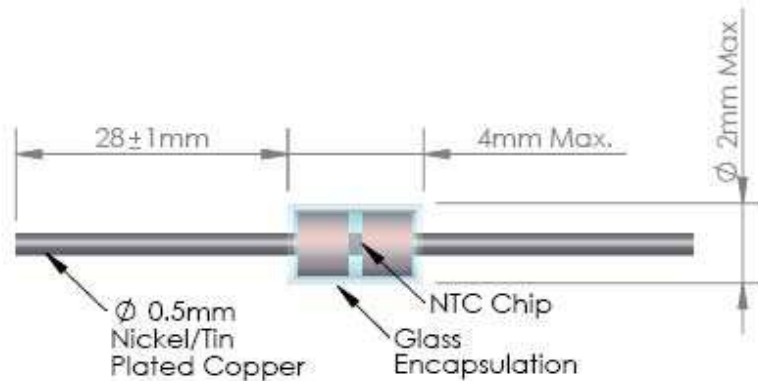
PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	200,000
Resistance tolerance @ +25°C	%	1
Beta Value 25/85	K	4000
Tolerance on Beta Value 25/85	%	2
Time response in still air	Seconds	<7
Dissipation Constant in still air	mW/°C	2.5

Reliability Tests	Standard	Test Condition	Delta R
Storage in Dry Heat	IEC 60068-2-2	Storage temperature: 200°C & 250°C Duration: 1000 hours	< 3%
Storage in Damp Heat	IEC 60068-2-3	Temperature of air is 40°C & RH 93% Duration: 56 days.	< 2%
Rapid Temperature Cycling	IEC 60068-2-14	Lower Test Temperature -55°C Upper Test Temperature +200°C Number of Cycles 50	< 2%

DO-35 Series Thermistor

MECHANICAL DETAILS



RESISTANCE V TEMPERATURE TABLE

Temp. °C	KOhms
----------	-------

-40	6,806.5236
-39	6,366.8095
-38	5,958.3737
-37	5,578.7986
-36	5,225.8675
-35	4,897.5469
-34	4,591.9705
-33	4,307.4244
-32	4,042.3337
-31	3,795.2508
-30	3,564.8438
-29	3,349.8871
-28	3,149.2524
-27	2,961.9000
-26	2,786.8716
-25	2,623.2836
-24	2,470.3206
-23	2,327.2300
-22	2,193.3167
-21	2,067.9384
-20	1,950.5014
-19	1,840.4566
-18	1,737.2958
-17	1,640.5487
-16	1,549.7795
-15	1,464.5846
-14	1,384.5898

Temp. °C	KOhms
----------	-------

-13	1,309.4481
-12	1,238.8374
-11	1,172.4588
-10	1,110.0347
-9	1,051.3074
-8	996.0371
-7	944.0010
-6	894.9917
-5	848.8164
-4	805.2955
-3	764.2616
-2	725.5591
-1	689.0425
0	654.5765
1	622.0347
2	591.2992
3	562.2598
4	534.8139
5	508.8654
6	484.3246
7	461.1074
8	439.1354
9	418.3353
10	398.6382
11	379.9798
12	362.2999
13	345.5419

Temp. °C	KOhms
----------	-------

14	329.6530
15	314.5835
16	300.2869
17	286.7194
18	273.8402
19	261.6107
20	249.9949
21	238.9586
22	228.4701
23	218.4994
24	209.0182
25	200.0000
26	191.4199
27	183.2542
28	175.4811
29	168.0795
30	161.0298
31	154.3136
32	147.9134
33	141.8128
34	135.9962
35	130.4491
36	125.1575
37	120.1085
38	115.2898
39	110.6897
40	106.2972

Temp. °C	KOhms
----------	-------

41	102.1020
42	98.0942
43	94.2645
44	90.6042
45	87.1050
46	83.7589
47	80.5587
48	77.4971
49	74.5675
50	71.7637
51	69.0814
52	66.5130
53	64.0530
54	61.6963
55	59.4382
56	57.2740
57	55.1994
58	53.2102
59	51.3026
60	49.4729
61	47.7174
62	46.0329
63	44.4162
64	42.8641
65	41.3739
66	39.9428
67	38.5681

DO-35 Series Thermistor

68	37.2475
69	35.9785
70	34.7588
71	33.5864
72	32.4592
73	31.3752
74	30.3326
75	29.3297
76	28.3647
77	27.4360
78	26.5422
79	25.6817
80	24.8532
81	24.0553
82	23.2868
83	22.5465
84	21.8332
85	21.1458
86	20.4832
87	19.8445
88	19.2286
89	18.6348
90	18.0620
91	17.5094
92	16.9764
93	16.4620
94	15.9655
95	15.4863
96	15.0236
97	14.5769
98	14.1455
99	13.7289
100	13.3264
101	12.9375
102	12.5617
103	12.1985
104	11.8474
105	11.5080
106	11.1799
107	10.8626
108	10.5557
109	10.2588
110	9.9716
111	9.6937
112	9.4248
113	9.1645

114	8.9126
115	8.6687
116	8.4325
117	8.2038
118	7.9823
119	7.7677
120	7.5598
121	7.3584
122	7.1633
123	6.9741
124	6.7908
125	6.6131
126	6.4407
127	6.2737
128	6.1116
129	5.9544
130	5.8020
131	5.6541
132	5.5106
133	5.3713
134	5.2362
135	5.1050
136	4.9776
137	4.8540
138	4.7339
139	4.6174
140	4.5041
141	4.3942
142	4.2873
143	4.1836
144	4.0827
145	3.9847
146	3.8894
147	3.7969
148	3.7069
149	3.6194
150	3.5343
151	3.4514
152	3.3708
153	3.2925
154	3.2163
155	3.1422
156	3.0701
157	3.0000
158	2.9318
159	2.8654

160	2.8009
161	2.7380
162	2.6768
163	2.6173
164	2.5593
165	2.5029
166	2.4480
167	2.3944
168	2.3423
169	2.2916
170	2.2421
171	2.1939
172	2.1470
173	2.1012
174	2.0566
175	2.0132
176	1.9708
177	1.9295
178	1.8893
179	1.8500
180	1.8117
181	1.7744
182	1.7380
183	1.7025
184	1.6678
185	1.6340
186	1.6011
187	1.5689
188	1.5375
189	1.5068
190	1.4769
191	1.4477
192	1.4192
193	1.3913
194	1.3641
195	1.3376
196	1.3117
197	1.2863
198	1.2616
199	1.2374
200	1.2138
201	1.1908
202	1.1682
203	1.1462
204	1.1247
205	1.1036

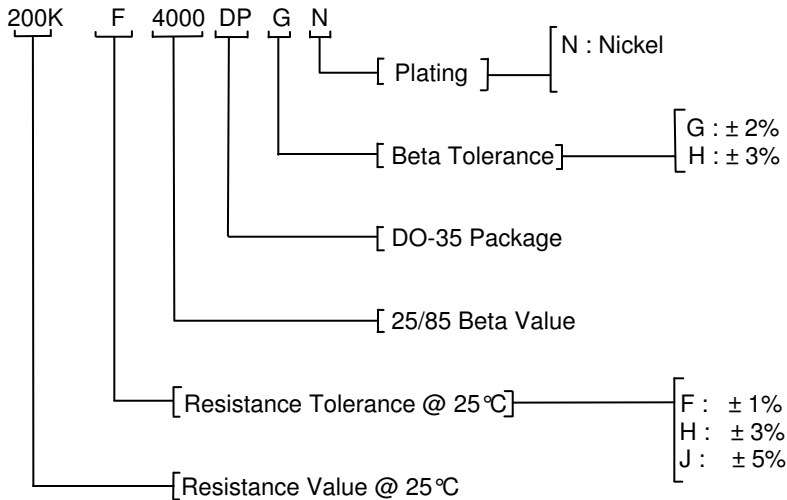
206	1.0831
207	1.0630
208	1.0433
209	1.0241
210	1.0053
211	0.9870
212	0.9690
213	0.9514
214	0.9342
215	0.9174
216	0.9010
217	0.8849
218	0.8691
219	0.8537
220	0.8387
221	0.8239
222	0.8095
223	0.7953
224	0.7815
225	0.7680
226	0.7547
227	0.7417
228	0.7290
229	0.7166
230	0.7044
231	0.6925
232	0.6808
233	0.6693
234	0.6581
235	0.6471
236	0.6364
237	0.6258
238	0.6155
239	0.6053
240	0.5954
241	0.5857
242	0.5762
243	0.5668
244	0.5577
245	0.5487
246	0.5399
247	0.5312
248	0.5228
249	0.5145
250	0.5063

DO-35 Series Thermistor

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
200KF4000DPGN	DO-35 Series Thermistor	200,000	5,000*

* For quantities less than Minimum Order Quantity – Contact Distribution



NORTH AMERICA

Measurement Specialties, Inc.
910 Turnpike Road
Shrewsbury, MA 01545
Tel: 1-508-842-0516
Fax: 1-508-842-0342

Sales email:
temperature.sales.amer@meas-spec.com

EUROPE

Measurement Specialties, Inc
Ballybrit Business Park
Galway Ireland
Tel: +353-91-753238
Fax: +353-91-770789

Sales email:
temperature.sales.emea@meas-spec.com

ASIA

Measurement Specialties (China) Ltd.
No. 26 Langshan Road
Shenzhen High-Tech Park (North)
Nanshan District, Shenzhen 51807
China
Tel: +86 (0) 755 33305088
Fax: +86 (0) 755 33305099

Sales email:
temperature.sales.asia@meas-spec.com

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.