

DO-35 Series Thermistor – 10KF3700DPGN



- 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

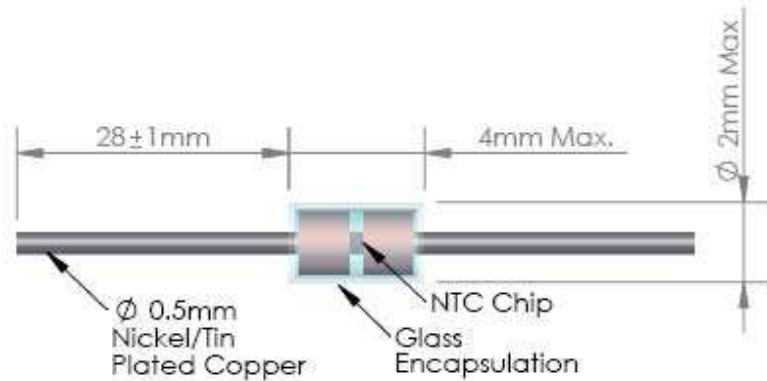
PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	10,000
Resistance tolerance @ +25°C	%	1
Beta Value 25/85	K	3700
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%

MECHANICAL DETAILS

DO-35 Series Thermistor



RESISTANCE V TEMPERATURE TABLE

Temp. °C	KOhms
-40	250.1083
-39	235.4285
-38	221.7048
-37	208.8692
-36	196.8587
-35	185.6152
-34	175.0850
-33	165.2187
-32	155.9702
-31	147.2973
-30	139.1607
-29	131.5240
-28	124.3535
-27	117.6180
-26	111.2887
-25	105.3385
-24	99.7426
-23	94.4779
-22	89.5228
-21	84.8574
-20	80.4630
-19	76.3223
-18	72.4194
-17	68.7391
-16	65.2675
-15	61.9917
-14	58.8994
-13	55.9794
-12	53.2211

Temp. °C	KOhms
-11	50.6147
-10	48.1510
-9	45.8213
-8	43.6177
-7	41.5327
-6	39.5592
-5	37.6906
-4	35.9208
-3	34.2441
-2	32.6551
-1	31.1487
0	29.7202
1	28.3651
2	27.0793
3	25.8589
4	24.7002
5	23.5998
6	22.5544
7	21.5610
8	20.6168
9	19.7190
10	18.8651
11	18.0528
12	17.2799
13	16.5441
14	15.8437
15	15.1766
16	14.5411
17	13.9356

Temp. °C	KOhms
18	13.3584
19	12.8082
20	12.2836
21	11.7832
22	11.3057
23	10.8501
24	10.4152
25	10.0000
26	9.6035
27	9.2247
28	8.8628
29	8.5169
30	8.1863
31	7.8702
32	7.5679
33	7.2788
34	7.0021
35	6.7374
36	6.4839
37	6.2413
38	6.0090
39	5.7864
40	5.5732
41	5.3689
42	5.1731
43	4.9854
44	4.8055
45	4.6329
46	4.4673

Temp. °C	KOhms
47	4.3085
48	4.1560
49	4.0097
50	3.8693
51	3.7345
52	3.6051
53	3.4809
54	3.3617
55	3.2472
56	3.1372
57	3.0315
58	2.9300
59	2.8324
60	2.7386
61	2.6484
62	2.5617
63	2.4782
64	2.3979
65	2.3207
66	2.2463
67	2.1748
68	2.1058
69	2.0395
70	1.9756
71	1.9140
72	1.8546
73	1.7974
74	1.7423
75	1.6892

DO-35 Series Thermistor

76	1.6379
77	1.5885
78	1.5408
79	1.4948
80	1.4505
81	1.4076
82	1.3663
83	1.3263
84	1.2878
85	1.2506
86	1.2146
87	1.1799
88	1.1463
89	1.1138
90	1.0825
91	1.0521
92	1.0228
93	0.9945
94	0.9671
95	0.9405
96	0.9149
97	0.8900
98	0.8660
99	0.8427
100	0.8202
101	0.7984
102	0.7772
103	0.7568
104	0.7370
105	0.7178
106	0.6992
107	0.6811
108	0.6636
109	0.6467
110	0.6303
111	0.6143
112	0.5989
113	0.5839
114	0.5694
115	0.5553
116	0.5416
117	0.5283
118	0.5154
119	0.5029

120	0.4907
121	0.4789
122	0.4675
123	0.4563
124	0.4455
125	0.4350
126	0.4248
127	0.4149
128	0.4052
129	0.3959
130	0.3868
131	0.3779
132	0.3693
133	0.3609
134	0.3528
135	0.3449
136	0.3371
137	0.3296
138	0.3223
139	0.3152
140	0.3083
141	0.3016
142	0.2950
143	0.2887
144	0.2824
145	0.2764
146	0.2705
147	0.2648
148	0.2592
149	0.2537
150	0.2484
151	0.2432
152	0.2382
153	0.2332
154	0.2284
155	0.2238
156	0.2192
157	0.2147
158	0.2104
159	0.2062
160	0.2020
161	0.1980
162	0.1941
163	0.1902

164	0.1865
165	0.1829
166	0.1793
167	0.1758
168	0.1724
169	0.1691
170	0.1659
171	0.1627
172	0.1596
173	0.1566
174	0.1537
175	0.1508
176	0.1480
177	0.1453
178	0.1426
179	0.1400
180	0.1374
181	0.1349
182	0.1324
183	0.1301
184	0.1277
185	0.1254
186	0.1232
187	0.1210
188	0.1189
189	0.1168
190	0.1147
191	0.1127
192	0.1108
193	0.1089
194	0.1070
195	0.1051
196	0.1033
197	0.1016
198	0.0999
199	0.0982
200	0.0965
201	0.0949
202	0.0933
203	0.0918
204	0.0903
205	0.0888
206	0.0873
207	0.0859

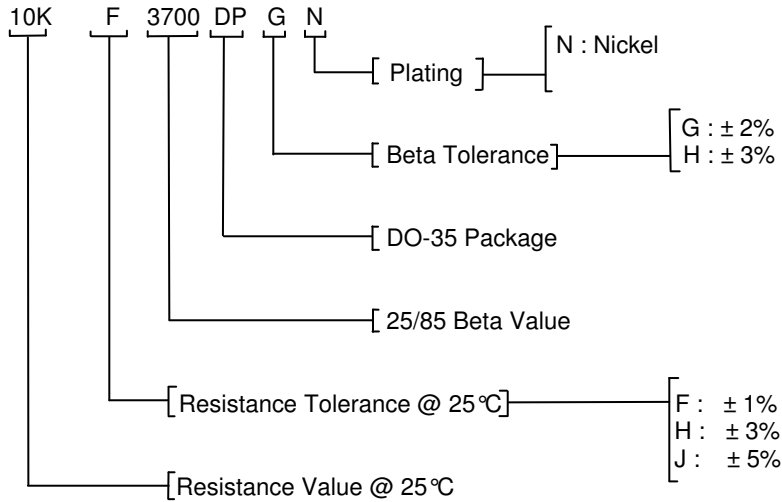
208	0.0845
209	0.0831
210	0.0818
211	0.0805
212	0.0792
213	0.0779
214	0.0767
215	0.0755
216	0.0743
217	0.0731
218	0.0720
219	0.0709
220	0.0698
221	0.0687
222	0.0676
223	0.0666
224	0.0656
225	0.0646
226	0.0636
227	0.0627
228	0.0617
229	0.0608
230	0.0599
231	0.0590
232	0.0581
233	0.0573
234	0.0564
235	0.0556
236	0.0548
237	0.0540
238	0.0532
239	0.0524
240	0.0517
241	0.0510
242	0.0502
243	0.0495
244	0.0488
245	0.0481
246	0.0474
247	0.0468
248	0.0461
249	0.0455
250	0.0449

ORDERING INFORMATION

DO-35 Series Thermistor

Part Number	Description	Ω @25°C	MOQ
10KF3700DPGN	DO-35 Series Thermistor	10,000	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.