

DO-35 Series Thermistor – 10KF3950DPGN



- 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

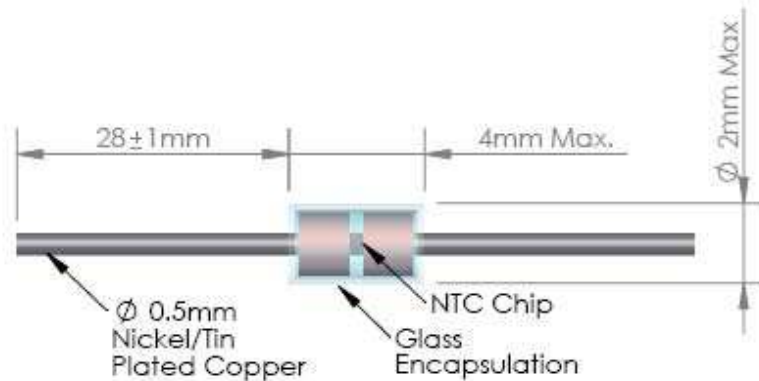
PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	10,000
Resistance tolerance @ +25°C	%	1
Beta Value 25/85	K	3950
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%

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MECHANICAL DETAILS



RESISTANCE V TEMPERATURE TABLE

Temp. °C	KOhms
-40	339.5068
-39	317.3548
-38	296.8037
-37	277.7273
-36	260.0098
-35	243.5454
-34	228.2372
-33	213.9964
-32	200.7417
-31	188.3982
-30	176.8975
-29	166.1766
-28	156.1775
-27	146.8470
-26	138.1363
-25	130.0001
-24	122.3970
-23	115.2886
-22	108.6397
-21	102.4178
-20	96.5927
-19	91.1366
-18	86.0240
-17	81.2311
-16	76.7360
-15	72.5183
-14	68.5592

Temp. °C	KOhms
-13	64.8414
-12	61.3486
-11	58.0660
-10	54.9795
-9	52.0764
-8	49.3446
-7	46.7730
-6	44.3513
-5	42.0699
-4	39.9198
-3	37.8927
-2	35.9809
-1	34.1771
0	32.4747
1	30.8672
2	29.3490
3	27.9146
4	26.5587
5	25.2768
6	24.0643
7	22.9172
8	21.8314
9	20.8035
10	19.8299
11	18.9076
12	18.0335
13	17.2049

Temp. °C	KOhms
14	16.4191
15	15.6737
16	14.9664
17	14.2950
18	13.6576
19	13.0522
20	12.4771
21	11.9305
22	11.4110
23	10.9169
24	10.4470
25	10.0000
26	9.5746
27	9.1696
28	8.7839
29	8.4166
30	8.0667
31	7.7332
32	7.4153
33	7.1122
34	6.8232
35	6.5474
36	6.2843
37	6.0331
38	5.7933
39	5.5644
40	5.3457

Temp. °C	KOhms
41	5.1367
42	4.9370
43	4.7462
44	4.5637
45	4.3892
46	4.2222
47	4.0625
48	3.9097
49	3.7634
50	3.6233
51	3.4896
52	3.3615
53	3.2388
54	3.1212
55	3.0084
56	2.9003
57	2.7966
58	2.6971
59	2.6017
60	2.5101
61	2.4222
62	2.3378
63	2.2568
64	2.1790
65	2.1043
66	2.0325
67	1.9635

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68	1.8972
69	1.8335
70	1.7722
71	1.7133
72	1.6567
73	1.6021
74	1.5497
75	1.4992
76	1.4506
77	1.4039
78	1.3589
79	1.3155
80	1.2737
81	1.2335
82	1.1947
83	1.1574
84	1.1214
85	1.0867
86	1.0532
87	1.0209
88	0.9898
89	0.9598
90	0.9308
91	0.9029
92	0.8759
93	0.8499
94	0.8247
95	0.8004
96	0.7770
97	0.7543
98	0.7325
99	0.7113
100	0.6909
101	0.6712
102	0.6521
103	0.6336
104	0.6158
105	0.5986
106	0.5819
107	0.5657
108	0.5501
109	0.5350
110	0.5204
111	0.5062
112	0.4925
113	0.4792

114	0.4664
115	0.4540
116	0.4419
117	0.4302
118	0.4189
119	0.4080
120	0.3973
121	0.3870
122	0.3770
123	0.3674
124	0.3580
125	0.3489
126	0.3400
127	0.3315
128	0.3232
129	0.3151
130	0.3073
131	0.2997
132	0.2923
133	0.2852
134	0.2782
135	0.2715
136	0.2649
137	0.2585
138	0.2524
139	0.2463
140	0.2405
141	0.2348
142	0.2293
143	0.2240
144	0.2188
145	0.2137
146	0.2088
147	0.2040
148	0.1993
149	0.1948
150	0.1904
151	0.1860
152	0.1818
153	0.1778
154	0.1738
155	0.1699
156	0.1661
157	0.1625
158	0.1589
159	0.1554

160	0.1520
161	0.1487
162	0.1455
163	0.1424
164	0.1394
165	0.1364
166	0.1335
167	0.1307
168	0.1280
169	0.1253
170	0.1227
171	0.1201
172	0.1177
173	0.1153
174	0.1129
175	0.1106
176	0.1084
177	0.1062
178	0.1041
179	0.1020
180	0.1000
181	0.0980
182	0.0960
183	0.0942
184	0.0923
185	0.0905
186	0.0888
187	0.0871
188	0.0854
189	0.0838
190	0.0822
191	0.0806
192	0.0791
193	0.0776
194	0.0761
195	0.0747
196	0.0733
197	0.0720
198	0.0707
199	0.0694
200	0.0681
201	0.0669
202	0.0657
203	0.0645
204	0.0633
205	0.0622

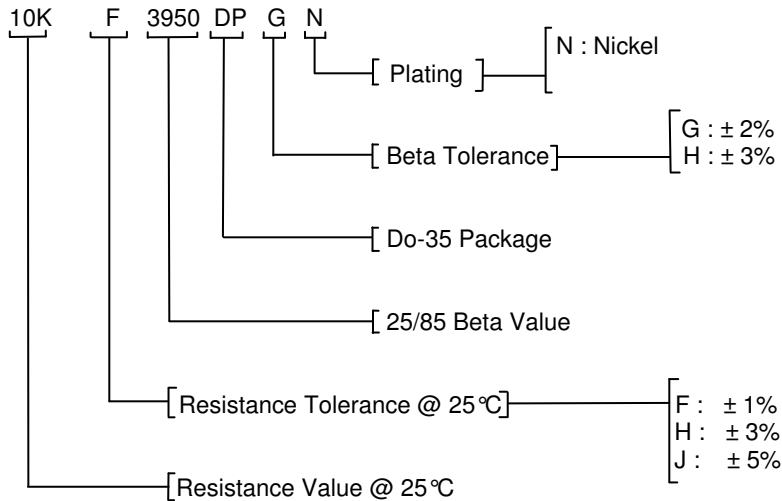
206	0.0611
207	0.0600
208	0.0589
209	0.0579
210	0.0569
211	0.0559
212	0.0549
213	0.0540
214	0.0531
215	0.0522
216	0.0513
217	0.0504
218	0.0495
219	0.0487
220	0.0479
221	0.0471
222	0.0463
223	0.0455
224	0.0448
225	0.0440
226	0.0433
227	0.0426
228	0.0419
229	0.0412
230	0.0406
231	0.0399
232	0.0393
233	0.0387
234	0.0380
235	0.0374
236	0.0369
237	0.0363
238	0.0357
239	0.0352
240	0.0346
241	0.0341
242	0.0335
243	0.0330
244	0.0325
245	0.0320
246	0.0315
247	0.0311
248	0.0306
249	0.0301
250	0.0297

DO-35 Series Thermistor

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10KF3950DPGN	DO-35 Series Thermistor	10,000	5,000*

* For quantities less than Minimum Order Quantity – Contact Distribution



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