

DO-35 Series Thermistor – 10KF3270DPGN



- 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

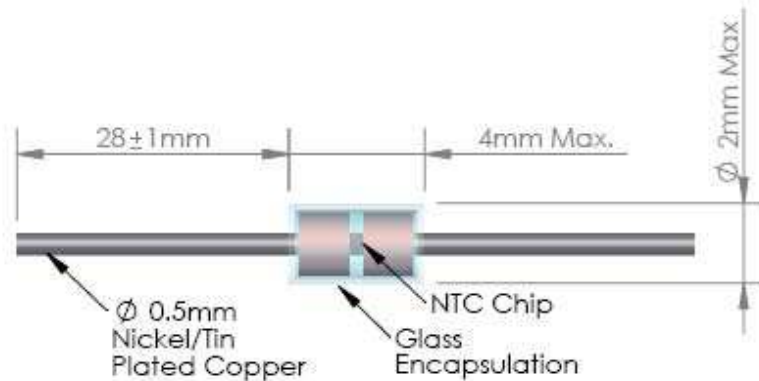
PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	10,000
Resistance tolerance @ +25°C	%	1
Beta Value 25/85	K	3270
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	164.2730
-39	155.9484
-38	148.0961
-37	140.6865
-36	133.6922
-35	127.0875
-34	120.8486
-33	114.9530
-32	109.3800
-31	104.1101
-30	99.1252
-29	94.4082
-28	89.9432
-27	85.7155
-26	81.7110
-25	77.9168
-24	74.3207
-23	70.9113
-22	67.6778
-21	64.6103
-20	61.6992
-19	58.9359
-18	56.3120
-17	53.8197
-16	51.4517
-15	49.2013
-14	47.0618

Temp. °C	KOhms
-13	45.0273
-12	43.0921
-11	41.2508
-10	39.4983
-9	37.8300
-8	36.2412
-7	34.7279
-6	33.2861
-5	31.9120
-4	30.6020
-3	29.3530
-2	28.1616
-1	27.0251
0	25.9405
1	24.9052
2	23.9168
3	22.9728
4	22.0712
5	21.2097
6	20.3863
7	19.5993
8	18.8468
9	18.1271
10	17.4387
11	16.7800
12	16.1496
13	15.5461

Temp. °C	KOhms
14	14.9683
15	14.4150
16	13.8850
17	13.3771
18	12.8905
19	12.4240
20	11.9768
21	11.5479
22	11.1366
23	10.7420
24	10.3634
25	10.0000
26	9.6512
27	9.3163
28	8.9947
29	8.6857
30	8.3890
31	8.1038
32	7.8297
33	7.5663
34	7.3130
35	7.0694
36	6.8352
37	6.6098
38	6.3930
39	6.1843
40	5.9834

Temp. °C	KOhms
41	5.7901
42	5.6039
43	5.4246
44	5.2519
45	5.0855
46	4.9252
47	4.7707
48	4.6218
49	4.4783
50	4.3398
51	4.2065
52	4.0780
53	3.9540
54	3.8344
55	3.7190
56	3.6076
57	3.5001
58	3.3964
59	3.2962
60	3.1995
61	3.1061
62	3.0159
63	2.9287
64	2.8445
65	2.7631
66	2.6844
67	2.6084

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68	2.5348
69	2.4637
70	2.3950
71	2.3284
72	2.2641
73	2.2018
74	2.1416
75	2.0833
76	2.0268
77	1.9721
78	1.9192
79	1.8680
80	1.8183
81	1.7702
82	1.7236
83	1.6785
84	1.6347
85	1.5923
86	1.5512
87	1.5114
88	1.4727
89	1.4352
90	1.3989
91	1.3636
92	1.3294
93	1.2962
94	1.2640
95	1.2328
96	1.2024
97	1.1729
98	1.1443
99	1.1166
100	1.0896
101	1.0634
102	1.0379
103	1.0132
104	0.9892
105	0.9658
106	0.9431
107	0.9211
108	0.8996
109	0.8788
110	0.8585
111	0.8388
112	0.8196
113	0.8010

114	0.7828
115	0.7652
116	0.7480
117	0.7313
118	0.7150
119	0.6992
120	0.6838
121	0.6688
122	0.6542
123	0.6399
124	0.6261
125	0.6126
126	0.5994
127	0.5866
128	0.5741
129	0.5620
130	0.5501
131	0.5386
132	0.5273
133	0.5164
134	0.5057
135	0.4952
136	0.4851
137	0.4751
138	0.4655
139	0.4560
140	0.4468
141	0.4379
142	0.4291
143	0.4205
144	0.4122
145	0.4041
146	0.3961
147	0.3883
148	0.3808
149	0.3734
150	0.3662
151	0.3591
152	0.3522
153	0.3454
154	0.3388
155	0.3324
156	0.3261
157	0.3200
158	0.3139
159	0.3081

160	0.3023
161	0.2967
162	0.2912
163	0.2859
164	0.2806
165	0.2755
166	0.2705
167	0.2656
168	0.2608
169	0.2561
170	0.2516
171	0.2471
172	0.2427
173	0.2384
174	0.2342
175	0.2301
176	0.2261
177	0.2221
178	0.2183
179	0.2145
180	0.2108
181	0.2072
182	0.2037
183	0.2002
184	0.1968
185	0.1935
186	0.1902
187	0.1870
188	0.1839
189	0.1809
190	0.1779
191	0.1749
192	0.1721
193	0.1692
194	0.1665
195	0.1638
196	0.1611
197	0.1585
198	0.1560
199	0.1535
200	0.1510
201	0.1486
202	0.1463
203	0.1440
204	0.1417
205	0.1395

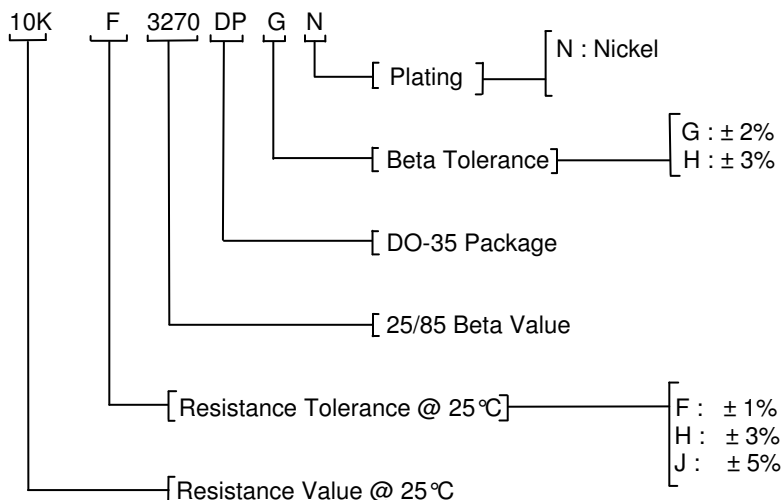
206	0.1373
207	0.1352
208	0.1331
209	0.1311
210	0.1290
211	0.1271
212	0.1251
213	0.1232
214	0.1214
215	0.1195
216	0.1177
217	0.1160
218	0.1142
219	0.1125
220	0.1109
221	0.1092
222	0.1076
223	0.1061
224	0.1045
225	0.1030
226	0.1015
227	0.1000
228	0.0986
229	0.0972
230	0.0958
231	0.0944
232	0.0931
233	0.0918
234	0.0905
235	0.0892
236	0.0880
237	0.0868
238	0.0855
239	0.0844
240	0.0832
241	0.0821
242	0.0809
243	0.0798
244	0.0787
245	0.0777
246	0.0766
247	0.0756
248	0.0746
249	0.0736
250	0.0726

DO-35 Series Thermistor

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10KF3270DPGN	DO-35 Series Thermistor	10,000	5,000*

* For quantities less than Minimum Order Quantity – Contact Distribution



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