

DO-35 Series Thermistor – 10KF3975DPGS



- PCB Mounting
- Hermetically sealed elements, glass encapsulation
- Axial Leads
- High temperature devices for applications to +200°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
- High temperature capability to +200°C
- 24AWG Tin Plated Copper Leads
- Low cost
- Temperature range -40 °C to +200 °C

APPLICATIONS

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

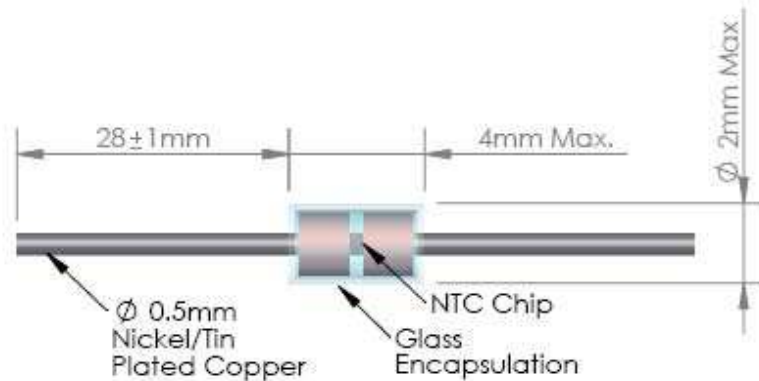
PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	10,000
Resistance tolerance @ +25°C	%	1
Beta Value 25/85	K	3975
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	347.1662
-39	324.3758
-38	303.2416
-37	283.6321
-36	265.4271
-35	248.5168
-34	232.8004
-33	218.1860
-32	204.5889
-31	191.9318
-30	180.1435
-29	169.1589
-28	158.9179
-27	149.3655
-26	140.4510
-25	132.1277
-24	124.3527
-23	117.0864
-22	110.2924
-21	103.9370
-20	97.9892
-19	92.4202
-18	87.2038
-17	82.3153
-16	77.7321
-15	73.4334
-14	69.3997

Temp. °C	KOhms
-13	65.6131
-12	62.0570
-11	58.7160
-10	55.5758
-9	52.6231
-8	49.8456
-7	47.2319
-6	44.7714
-5	42.4542
-4	40.2711
-3	38.2136
-2	36.2737
-1	34.4440
0	32.7177
1	31.0882
2	29.5497
3	28.0965
4	26.7234
5	25.4256
6	24.1985
7	23.0378
8	21.9396
9	20.9002
10	19.9160
11	18.9840
12	18.1009
13	17.2640

Temp. °C	KOhms
14	16.4707
15	15.7183
16	15.0046
17	14.3274
18	13.6846
19	13.0742
20	12.4946
21	11.9438
22	11.4205
23	10.9230
24	10.4499
25	10.0000
26	9.5719
27	9.1645
28	8.7767
29	8.4074
30	8.0557
31	7.7206
32	7.4013
33	7.0969
34	6.8067
35	6.5299
36	6.2658
37	6.0139
38	5.7734
39	5.5438
40	5.3245

Temp. °C	KOhms
41	5.1151
42	4.9150
43	4.7238
44	4.5411
45	4.3664
46	4.1993
47	4.0394
48	3.8865
49	3.7402
50	3.6001
51	3.4664
52	3.3384
53	3.2158
54	3.0982
55	2.9856
56	2.8776
57	2.7741
58	2.6748
59	2.5796
60	2.4882
61	2.4006
62	2.3164
63	2.2357
64	2.1581
65	2.0837
66	2.0121
67	1.9434

DO-35 Series Thermistor

68	1.8774
69	1.8139
70	1.7529
71	1.6943
72	1.6379
73	1.5837
74	1.5315
75	1.4813
76	1.4330
77	1.3865
78	1.3418
79	1.2987
80	1.2572
81	1.2173
82	1.1788
83	1.1417
84	1.1060
85	1.0715
86	1.0383
87	1.0063
88	0.9754
89	0.9457
90	0.9169
91	0.8892
92	0.8625
93	0.8367
94	0.8118
95	0.7877
96	0.7645
97	0.7421
98	0.7205
99	0.6995
100	0.6793
101	0.6598

102	0.6409
103	0.6227
104	0.6050
105	0.5880
106	0.5715
107	0.5555
108	0.5401
109	0.5252
110	0.5107
111	0.4968
112	0.4832
113	0.4701
114	0.4574
115	0.4452
116	0.4333
117	0.4217
118	0.4106
119	0.3998
120	0.3893
121	0.3791
122	0.3693
123	0.3598
124	0.3505
125	0.3415
126	0.3328
127	0.3244
128	0.3162
129	0.3083
130	0.3006
131	0.2931
132	0.2858
133	0.2788
134	0.2720
135	0.2653

136	0.2589
137	0.2526
138	0.2465
139	0.2406
140	0.2349
141	0.2293
142	0.2239
143	0.2186
144	0.2135
145	0.2085
146	0.2037
147	0.1990
148	0.1944
149	0.1900
150	0.1857
151	0.1814
152	0.1773
153	0.1733
154	0.1694
155	0.1656
156	0.1619
157	0.1583
158	0.1548
159	0.1514
160	0.1481
161	0.1448
162	0.1417
163	0.1386
164	0.1356
165	0.1327
166	0.1299
167	0.1272
168	0.1245
169	0.1219

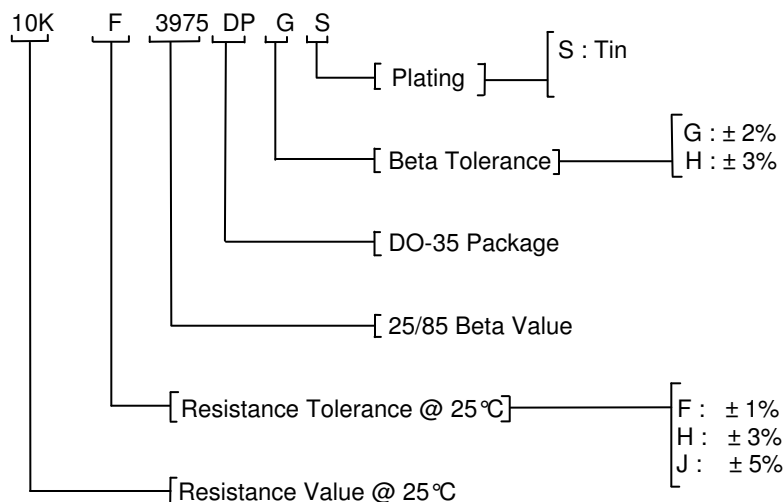
170	0.1193
171	0.1168
172	0.1144
173	0.1120
174	0.1097
175	0.1075
176	0.1053
177	0.1032
178	0.1011
179	0.0991
180	0.0971
181	0.0951
182	0.0933
183	0.0914
184	0.0896
185	0.0879
186	0.0862
187	0.0845
188	0.0829
189	0.0813
190	0.0797
191	0.0782
192	0.0767
193	0.0752
194	0.0738
195	0.0724
196	0.0711
197	0.0698
198	0.0685
199	0.0672
200	0.0660

ORDERING INFORMATION

DO-35 Series Thermistor

Part Number	Description	Ω @25°C	MOQ
10KF3975DPGS	DO-35 Series Thermistor	10,000	5,000*

* For quantities less than Minimum Order Quantity – Contact Distribution



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