

DO-35 Series Thermistor – 100KF3975DPGN



- 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

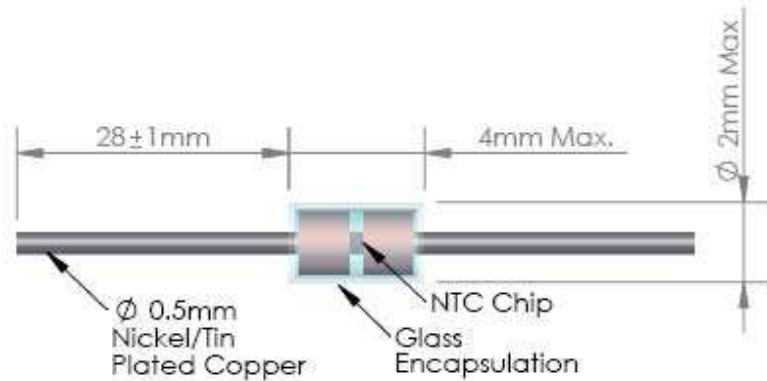
PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	100,000
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%

MECHANICAL DETAILS

DO-35 Series Thermistor



RESISTANCE V TEMPERATURE TABLE

Temp. °C	KOhms	Temp. °C	KOhms	Temp. °C	KOhms	Temp. °C	KOhms
-40	3,323.6079	-11	577.5679	18	136.5713	47	40.5299
-39	3,109.1091	-10	547.0546	19	130.5217	48	38.9978
-38	2,909.9335	-9	518.3386	20	124.7731	49	37.5314
-37	2,724.8848	-8	491.3035	21	119.3089	50	36.1273
-36	2,552.8680	-7	465.8413	22	114.1138	51	34.7869
-35	2,392.8799	-6	441.8514	23	109.1729	52	33.5029
-34	2,244.0007	-5	419.2403	24	104.4726	53	32.2725
-33	2,105.3871	-4	397.9208	25	100.0000	54	31.0933
-32	1,976.2648	-3	377.8119	26	95.7428	55	29.9630
-31	1,855.9230	-2	358.8380	27	91.6896	56	28.8793
-30	1,743.7083	-1	340.9286	28	87.8295	57	27.8400
-29	1,639.0202	0	324.0181	29	84.1524	58	26.8432
-28	1,541.3061	1	308.0450	30	80.6488	59	25.8869
-27	1,450.0575	2	292.9524	31	77.3094	60	24.9692
-26	1,364.8060	3	278.6867	32	74.1259	61	24.0886
-25	1,285.1200	4	265.1981	33	71.0902	62	23.2432
-24	1,210.6016	5	252.4400	34	68.1947	63	22.4315
-23	1,140.8836	6	240.3689	35	65.4322	64	21.6521
-22	1,075.6273	7	228.9439	36	62.7959	65	20.9035
-21	1,014.5198	8	218.1270	37	60.2795	66	20.1843
-20	957.2719	9	207.8825	38	57.8769	67	19.4933
-19	903.6165	10	198.1771	39	55.5825	68	18.8292
-18	853.3064	11	188.9795	40	53.3907	69	18.1909
-17	806.1128	12	180.2604	41	51.2967	70	17.5773
-16	761.8240	13	171.9924	42	49.2954	71	16.9872
-15	720.2440	14	164.1497	43	47.3824	72	16.4198
-14	681.1909	15	156.7082	44	45.5533	73	15.8739
-13	644.4961	16	149.6452	45	43.8041	74	15.3488
-12	610.0035	17	142.9396	46	42.1308	75	14.8435

DO-35 Series Thermistor

76	14.3572
77	13.8891
78	13.4384
79	13.0045
80	12.5865
81	12.1840
82	11.7961
83	11.4224
84	11.0623
85	10.7151
86	10.3805
87	10.0578
88	9.7466
89	9.4465
90	9.1569
91	8.8776
92	8.6080
93	8.3479
94	8.0967
95	7.8543
96	7.6202
97	7.3941
98	7.1758
99	6.9648
100	6.7610
101	6.5641
102	6.3738
103	6.1898
104	6.0120
105	5.8400
106	5.6737
107	5.5129
108	5.3574
109	5.2069
110	5.0613
111	4.9204
112	4.7841
113	4.6521
114	4.5243
115	4.4006
116	4.2808
117	4.1647
118	4.0524
119	3.9435

120	3.8380
121	3.7358
122	3.6368
123	3.5408
124	3.4477
125	3.3575
126	3.2700
127	3.1852
128	3.1029
129	3.0231
130	2.9457
131	2.8706
132	2.7977
133	2.7270
134	2.6583
135	2.5917
136	2.5270
137	2.4642
138	2.4032
139	2.3440
140	2.2865
141	2.2306
142	2.1763
143	2.1236
144	2.0724
145	2.0226
146	1.9742
147	1.9271
148	1.8814
149	1.8369
150	1.7937
151	1.7517
152	1.7109
153	1.6712
154	1.6326
155	1.5951
156	1.5585
157	1.5230
158	1.4885
159	1.4549
160	1.4222
161	1.3903
162	1.3594
163	1.3292

164	1.2999
165	1.2713
166	1.2435
167	1.2164
168	1.1900
169	1.1643
170	1.1393
171	1.1149
172	1.0911
173	1.0680
174	1.0454
175	1.0234
176	1.0020
177	0.9811
178	0.9607
179	0.9409
180	0.9215
181	0.9026
182	0.8842
183	0.8662
184	0.8487
185	0.8316
186	0.8149
187	0.7987
188	0.7828
189	0.7673
190	0.7522
191	0.7374
192	0.7230
193	0.7089
194	0.6952
195	0.6818
196	0.6687
197	0.6559
198	0.6434
199	0.6312
200	0.6192
201	0.6076
202	0.5962
203	0.5851
204	0.5742
205	0.5636
206	0.5532
207	0.5430

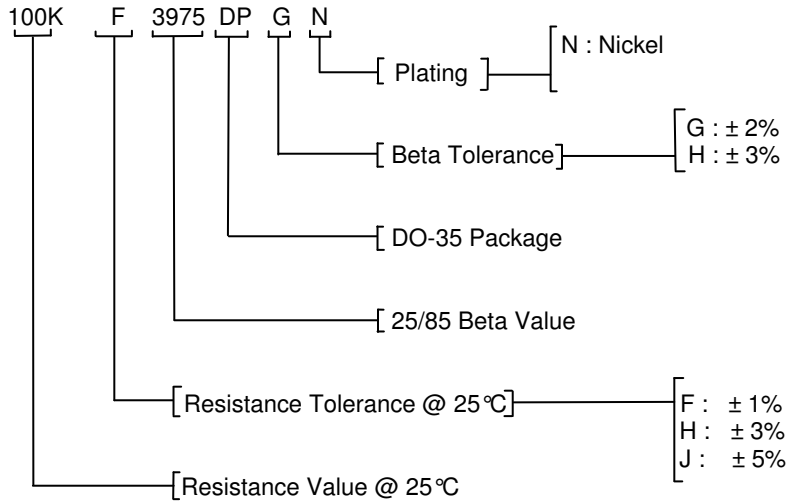
208	0.5331
209	0.5234
210	0.5139
211	0.5047
212	0.4956
213	0.4867
214	0.4780
215	0.4696
216	0.4612
217	0.4531
218	0.4452
219	0.4374
220	0.4298
221	0.4223
222	0.4151
223	0.4079
224	0.4009
225	0.3941
226	0.3874
227	0.3809
228	0.3745
229	0.3682
230	0.3620
231	0.3560
232	0.3501
233	0.3443
234	0.3387
235	0.3331
236	0.3277
237	0.3224
238	0.3171
239	0.3120
240	0.3070
241	0.3021
242	0.2973
243	0.2926
244	0.2879
245	0.2834
246	0.2790
247	0.2746
248	0.2703
249	0.2661
250	0.2620

ORDERING INFORMATION

DO-35 Series Thermistor

Part Number	Description	Ω @25°C	MOQ
100KF3975DPGN	DO-35 Series Thermistor	100,000	5,000*

* For quantities less than Minimum Order Quantity – Contact Distribution



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