DG series thermistor

Description

Glass sealing type thermistor is designed for high environmental reliability and wide temperature range of usage (-50℃ ~ 300℃). DG series thermistor gives excellent high temperature stability. DG series thermistor can be applied to various fields, such as home appliance, automobile, medical, and other industrial applications.
We supply various size of glass sealing type thermistors, so it is possible to choose the size to match the diverse applications.

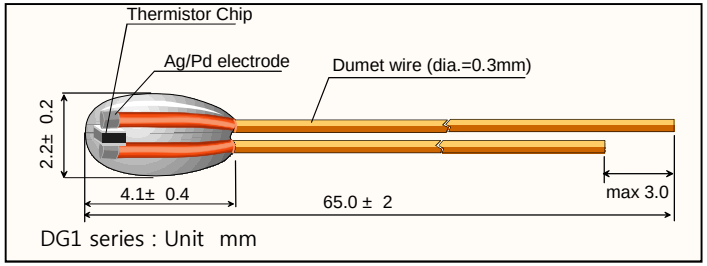
Feature

- ▶ Glass size : Ø 2.2, Ø 1.8, Ø 1.3, Ø 1.0 mm standard size
- ▶ Excellent stability at high temperature
- ▶ Excellent stability at high humidity condition (tight glass sealing)
- ▶ Cost effective design

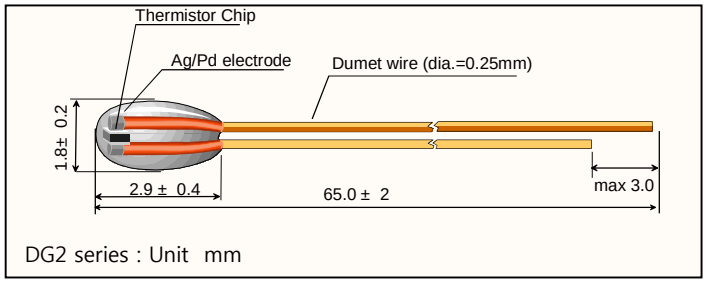
Electrical and thermal characteristics

Item	DG1	DG2	DG3	DG4
Thermal time constant (in still air)	~11sec (9~15)	~8sec (6.5~9.5)	~5sec (3.5~6.5)	~3sec (2.5~4)
Dissipation constant (in still air)[mW/℃]	1.0~ 1.5mW/℃	0.9~ 1.4mW/℃	0.7~ 1.2mW/℃	0.5~0.8 mW/℃
Insulation resistance (between lead and glass)	Min 50㏁ (500VDC)	Min 25㏁ (50VDC)	Min 10㏁ (50VDC)	Min 10㏁ (50VDC)
operating temperature	-50℃ ~ 300℃			

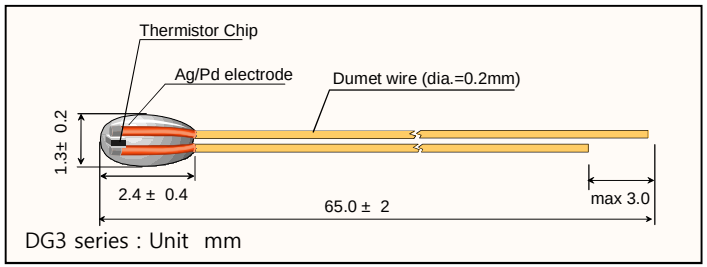
Shape and dimension



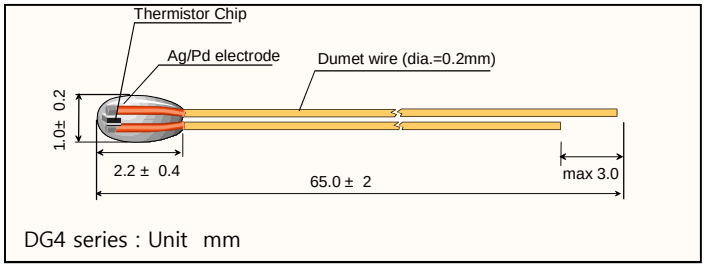
DG1 series : Unit mm



DG2 series : Unit mm



DG3 series : Unit mm



DG4 series : Unit mm

Explanation of Part No.

DG#	A	103	H	B	-X
type	Curve type	Resistance Value	Resistance tolerance	Reference temp.(℃)	optional code
Glass size of thermistors DG1 : Φ2.2mm DG2 : Φ1.8 mm DG3 : Φ1.3 mm DG4 : Φ1.0 mm	R-T curve characteristics	502=50X100 =5.0KΩ 303=30X1000 =30.0KΩ 10.74 = 10.74kΩ	F : R±1%, B±1% G :R±2%, B±2% H :R±3%, B±2% J : R±5%, B±2%	A :0℃ B : 25℃ C : 50℃ F : 100℃ G : 150℃ H : 200℃ …	blank : no plating -S : Tin plating -N : Ni plating

Part No. List

Part No			Normal Resistance	B - value	R-T curve
DG#A	502	☐ B	R 25 = 5.00 kΩ	B25/85 = 3970K	A
	103	☐ B	R 25 = 10.0 kΩ		
	203	☐ B	R 25 = 20.0 kΩ		
	303	☐ B	R 25 = 30.0 kΩ		
DG#B	103	☐ B	R 25 = 10.00 kΩ	B25/85 = 3435K	B
	273	☐ A	R 0 = 27.62 kΩ		
DG#C	493	☐ B	R 25 = 49.1 kΩ	B25/85 = 3990K	C
	8.542	☐ S	R 70 = 8.54 kΩ	B0/100 = 3970K	
	332	☐ F	R 100 = 3.3 kΩ	B0/100 = 3970K	
DG#D	104	☐ B	R 25 = 100.0 kΩ	B25/85 = 4060K	D
	6.28	☐ F	R 100 = 6.28 kΩ	B0/100 = 4000K	
	551	☐ H	R 200 = 0.55 kΩ	B100/200 = 4330K	
DG#E	234	☐ B	R 25 = 230.0 kΩ	B25/85 = 4250K	E
	133	☐ F	R 100 = 13.06 kΩ	B0/100 = 4210K	
	102	☐ H	R 200 = 1.000 kΩ	B100/200 = 4550K	
DG#F	502	☐ B	R 25 = 5.00 kΩ	B25/85 = 3324K	F
	13.29	☐ A	R 0 = 13.29 kΩ	B0/25 = 3200K	
DG#J	10.74	☐ B	R 25 = 10.74 kΩ	B25/85 = 3480K	J
DG#M	104	☐ B	R 25 = 100.0 kΩ	B25/50 = 3950K	M

- No plating, Tin plating, Nickel plating is available (By customers request)
- If you need other spec. please contact to us
- "#" Head size 1/2/3/4

R-T Table (standard)

	A	B	C	D	E	F	J	M
-50	661.1	368.7	2993.0	6283.3	18842	129.32	412.0	6058.6
-45	467.7	272.8	2120.1	4455.0	13216	101.58	304.1	4331.8
-40	334.3	204.1	1523.4	3200.9	9358	79.62	226.9	3130.1
-35	241.4	154.3	1108.8	2327.6	6690	62.48	171.0	2284.8
-30	176.1	117.7	816.5	1711.2	4829	49.20	130.1	1683.9
-25	129.7	90.58	607.6	1270.8	3519	38.92	99.81	1252.6
-20	96.57	70.32	456.5	952.5	2588	30.95	77.25	940.0
-15	72.58	55.03	346.1	720.2	1921	24.76	60.28	711.5
-10	55.05	43.40	264.6	549.0	1439	19.91	47.41	542.8
-5	42.14	34.48	203.9	421.7	1087	16.10	37.57	417.4
0	32.53	27.60	158.3	326.3	827.9	13.09	29.99	323.4
5	25.31	22.24	123.7	254.3	635.5	10.69	24.11	252.4
10	19.85	18.04	97.37	199.5	491.6	8.781	19.51	198.3
15	15.69	14.73	77.14	157.5	383.0	7.245	15.89	156.8
20	12.48	12.10	61.49	125.1	300.5	6.005	13.03	124.9
25	10.00	10.00	49.32	100.0	237.3	5.000	10.74	100.0
30	8.062	8.309	39.78	80.39	188.6	4.182	8.905	80.57
35	6.540	6.941	32.28	65.00	150.8	3.514	7.423	65.29
40	5.336	5.827	26.33	52.84	121.3	2.965	6.218	53.20
45	4.378	4.916	21.59	43.18	98.16	2.513	5.234	43.58
50	3.612	4.165	17.80	35.48	79.85	2.138	4.426	35.88
55	2.995	3.544	14.74	29.29	65.29	1.827	3.758	29.69
60	2.496	3.028	12.27	24.30	53.66	1.567	3.204	24.69
65	2.090	2.596	10.26	20.25	44.32	1.350	2.741	20.62
70	1.758	2.234	8.619	16.96	36.77	1.167	2.354	17.30
75	1.486	1.929	7.271	14.26	30.66	1.012	2.028	14.58
80	1.261	1.671	6.160	12.05	25.67	0.881	1.753	12.33
85	1.075	1.451	5.240	10.22	21.59	0.770	1.520	10.48
90	0.919	1.264	4.475	8.697	18.23	0.675	1.321	8.935
95	0.790	1.104	3.836	7.433	15.46	0.593	1.152	7.649
100	0.681	0.967	3.300	6.376	13.16	0.523	1.007	6.571
105	0.589	0.849	2.849	5.489	11.24	0.463	0.883	5.666
110	0.512	0.747	2.468	4.741	9.642	0.411	0.776	4.901
115	0.446	0.659	2.145	4.109	8.298	0.366	0.683	4.254
120	0.390	0.583	1.870	3.572	7.165	0.327	0.603	3.704
125	0.342	0.517	1.636	3.116	6.207	0.293	0.534	3.235
130	0.301	0.459	1.435	2.725	5.395	0.263	0.474	2.834
135	0.265	0.409	1.262	2.391	4.703	0.237	0.422	2.489
140	0.235	0.365	1.114	2.103	4.112	0.213	0.376	2.193
145	0.208	0.326	0.985	1.856	3.605	0.192	0.336	1.937
150	0.185	0.293	0.874	1.641	3.170	0.174	0.301	1.716
155	0.165	0.263	0.777	1.455	2.794		0.270	1.524
160	0.148	0.237	0.693	1.294	2.469		0.243	1.356
165	0.132	0.214	0.619	1.153	2.188		0.219	1.210
170	0.119	0.193	0.555	1.030	1.943		0.198	1.083
175	0.107	0.175	0.498	0.922	1.730		0.180	0.970
180	0.097	0.159	0.448	0.828	1.543		0.163	0.872
185	0.087	0.145	0.404	0.744	1.380		0.148	0.785
190	0.079	0.132	0.366	0.671	1.237		0.135	0.708
195	0.072	0.120	0.331	0.606	1.111		0.123	0.640
200	0.065	0.110	0.300	0.548	1.000		0.113	0.579
205			0.273	0.497	0.902			0.526
210			0.249	0.452	0.815			0.478
215			0.227	0.411	0.738			0.435
220			0.208	0.375	0.670			0.397
225			0.190	0.342	0.609			0.362
230			0.174	0.313	0.554			0.331
235			0.160	0.287	0.506			0.303
240			0.147	0.263	0.462			0.278
245			0.136	0.242	0.423			0.255
250			0.125	0.223	0.388			0.235
255			0.116	0.205	0.356			0.216
260			0.107	0.189	0.327			0.199
265			0.099	0.175	0.301			0.184
270			0.092	0.162	0.278			0.170
275			0.085	0.150	0.256			0.157
280			0.079	0.139	0.237			0.145
285			0.074	0.129	0.219			0.135
290			0.069	0.120	0.203			0.125
295			0.064	0.112	0.188			0.116
300			0.060	0.105	0.175			0.108