



## Redfish Sensors

360 S. Adkins Way Suite A

Meridian Idaho 83642

208.475.3587 ph.

877-786-4698 fax

877-253-5755 toll free

[www.redfishsensors.com](http://www.redfishsensors.com)

[sales@redfishsensors.com](mailto:sales@redfishsensors.com)

Product : NTC THERMISTOR

Redfish Part No. : RGLA-103F-3950-C

Specifications : R<sub>25</sub> 10,000 Ω ± 1 %  
B<sub>25-50</sub> 3950 °K ± 1 %

## I、APPLICATION

- i. For household appliances such as electric cooker, bake maker, electromagnetic oven, dish washer, disinfectant and water fountain.
- ii. Suitable for automotive, telecom (battery packs), HVAC and white goods applications.
- iii. For industrial products such as pharmaceuticals, chemical industry equipments, food processor, etc.

## II、ELECTRICAL AND COMPLIANCE FEATURES

- i. **R25°C: 10 ± 1% kΩ**
- ii. **B 25°C/50°C: 3950±1% K**
- iii. Time constant: 7 Sec.(still air)
- iv. Time constant:0.5 Sec. (stirred liquid)
- v. Dissipation factor: 2.1mW/°C(min)
- vi. Maximum power rating:5mW(at 25°C)
- vii. Glass encapsulated with DO35, DO34, DO41 available,  
Resistance tolerance (at 25 degrees Celsius) among  
+/- 0.5% to +/- 10% available
- viii. RoHS Compliant.

## III、RELIABILITY CHARACTERISTICS TEST

- i. Storage in Dry Heat  
Storage temperature: 200°C & 250°C  
Duration: 1000 hours  
 $\Delta R/R < 3\%$

- ii. Storage in Damp Heat

Temperature of air is 40°C & RH 93%  
Duration: 1000 hours  
 $\Delta R/R \leq 2\%$

- iii. Rapid Temperature Cycling

Lower Test Temperature -55°C  
Upper Test Temperature +200°C  
Number of Cycles 50.  
 $\Delta R/R \leq 2\%$

- iv. Shift Test

1.0mA × 40 days.  
 $\Delta R/R \leq 2\%$

- v. Long-term stability ( empirical value)

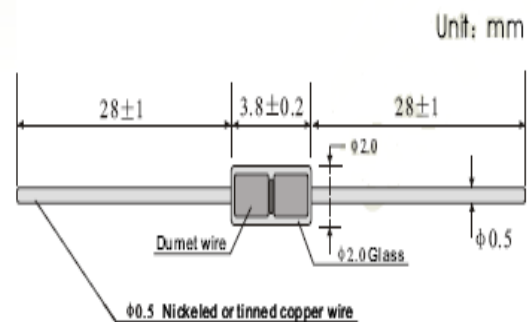
Placed for 10000 hours, at 70°C (in air)  
 $\Delta R/R \leq 2\%$

## IV、APPLICATION NOTES

- i. Operating Temperature : Tin Plating leads, -40°C ~ +204°C  
Nickel Plating leads, -40°C ~ +250°C
- ii. Cut the lead wire to your required length, limit  $\geq 8$ mm.

## V、Resistance-Temperature Table: (see accessory)

## VI、SIZE DRAWING: unit:mm



R-T TABLE							
R(25°C) 10.00 kohm			B(25/50) 3950 K				
Temp. (°C)	Rt(kΩ)	Temp. (°C)	Rt(kΩ)	Temp. (°C)	Rt(kΩ)	Temp. (°C)	Rt(kΩ)
-40	370.6	8	22.28	56	2.863	104	0.6288
-39	346.1	9	21.20	57	2.761	105	0.6118
-38	323.4	10	20.18	58	2.663	106	0.5954
-37	302.3	11	19.22	59	2.569	107	0.5795
-36	282.7	12	18.30	60	2.479	108	0.5641
-35	264.5	13	17.44	61	2.392	109	0.5492
-34	247.6	14	16.62	62	2.309	110	0.5348
-33	231.9	15	15.85	63	2.230	111	0.5208
-32	217.3	16	15.11	64	2.153	112	0.5073
-31	203.7	17	14.42	65	2.080	113	0.4941
-30	191.0	18	13.76	66	2.010	114	0.4814
-29	179.2	19	13.13	67	1.942	115	0.4691
-28	168.2	20	12.54	68	1.877	116	0.4571
-27	158.0	21	11.98	69	1.815	117	0.4455
-26	148.4	22	11.45	70	1.755	118	0.4342
-25	139.5	23	10.94	71	1.697	119	0.4233
-24	131.2	24	10.46	72	1.642	120	0.4128
-23	123.4	25	10.00	73	1.588	121	0.4025
-22	116.1	26	9.566	74	1.537	122	0.3925
-21	109.3	27	9.153	75	1.488	123	0.3829
-20	102.9	28	8.760	76	1.441	124	0.3735
-19	96.98	29	8.387	77	1.395	125	0.3644
-18	91.40	30	8.032	78	1.351	126	0.3555
-17	86.18	31	7.694	79	1.309	127	0.3469
-16	81.28	32	7.373	80	1.268	128	0.3386
-15	76.70	33	7.067	81	1.229	129	0.3305
-14	72.39	34	6.775	82	1.191	130	0.3227
-13	68.36	35	6.498	83	1.155	131	0.3151
-12	64.57	36	6.233	84	1.120	132	0.3076
-11	61.02	37	5.981	85	1.086	133	0.3004
-10	57.68	38	5.740	86	1.054	134	0.2935
-9	54.53	39	5.511	87	1.022	135	0.2867
-8	51.57	40	5.292	88	0.9924	136	0.2801
-7	48.79	41	5.083	89	0.9633	137	0.2736
-6	46.18	42	4.884	90	0.9353	138	0.2674
-5	43.73	43	4.694	91	0.9082	139	0.2613
-4	41.42	44	4.512	92	0.8821	140	0.2554
-3	39.25	45	4.338	93	0.8568	141	0.2497
-2	37.21	46	4.173	94	0.8325	142	0.2441
-1	35.29	47	4.014	95	0.8089	143	0.2387
0	33.47	48	3.862	96	0.7862	144	0.2334
1	31.78	49	3.717	97	0.7642	145	0.2283
2	30.18	50	3.579	98	0.7429	146	0.2233
3	28.67	51	3.446	99	0.7224	147	0.2184
4	27.24	52	3.319	100	0.7025	148	0.2137
5	25.90	53	3.197	101	0.6832	149	0.2091
6	24.62	54	3.081	102	0.6644	150	0.2046
7	23.42	55	2.970	103	0.6463		