High Accuracy NTC Thermistors

Features

- Glass sealed radial lead type
- Fast response time
- High reliability and high moisture proof
- Wide range of operating temperature from -50℃ up to 300℃

Applications

- Low cost probe assemblies
- High temperature printer ink sensing
- Consumer electronics
- High temperature-high speed tire manufacturing
- Printed circuit board temperature sensing
- Air-conditioner

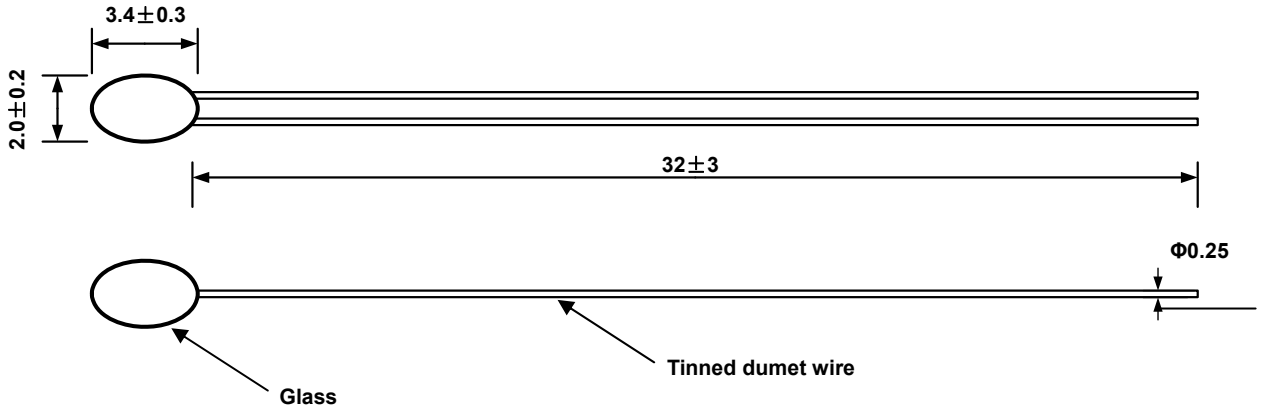
General Characteristics

Parameter	Test Conditions	Symbol	Value	Unit
Rated zero-power resistance		R_{25}	2,000~1,000,000	Ω
Tolerance of R_{25}			±1%, ±2%, ±3%, ±5%, ±10%	
Range of B value		$B_{0/50}$, $B_{25/50}$, $B_{25/85}$	2000~5000	K
Tolerance of B value			±0.5%, ±1%, ±1.5%	
Dissipation constant	In still air		1.1~1.6	mW/℃
Thermal time constant	In still air		10~17	Sec.
Operating temperature range			-50~+300	℃

R-T Characteristics

R_{25}	2 KΩ	5 KΩ	10 KΩ	10 KΩ	20 KΩ	30 KΩ	50 KΩ	100 KΩ	200 KΩ	500KΩ
$B_{25/50}$	3470	3500	3470	3950	3950	3950	3950	3950	4160	4300
-40℃	44.398	86.578								
-30℃	25.110	52.992								
-20℃	14.773	33.109	72.686	97.840	195.68	293.52	483.85	975.80	2193.5	
-10℃	9.0028	21.091	44.539	55.595	111.19	166.79	275.87	554.70	1212.1	
0℃	5.6623	13.684	28.135	32.755	65.509	98.264	163.01	327.02	695.60	1815.0
10℃	3.6640	9.0345	18.266	19.938	39.876	59.814	99.459	199.20	413.03	1058.4
20℃	2.4327	6.0654	12.155	12.501	25.001	37.502	62.465	124.97	252.90	637.29
30℃	1.6534	4.1380	8.2713	8.0512	16.102	24.154	40.273	80.527	159.22	395.00
40℃	1.1480	2.8671	5.7444	5.3146	10.629	15.944	26.590	53.164	102.82	251.36
50℃	0.8128	2.0165	4.0644	3.5882	7.1764	10.765	17.942	35.884	67.950	163.84
60℃	0.5859	1.4390	2.9251	2.4734	4.9468	7.4202	12.350	24.717	45.870	109.17
70℃	0.4294	1.0415	2.1385	1.7380	3.4760	5.2140	8.6573	17.345	31.574	74.221
80℃	0.3196	0.7643	1.5861	1.2431	2.4863	3.7294	6.1719	12.383	22.129	51.406
90℃	0.2412	0.5685	1.1923	0.9040	1.8080	2.7120	4.4689	8.9809	15.769	36.220
100℃	0.1845	0.4285	0.9074	0.6676	1.3352	2.0028	3.2828	6.6101	11.412	25.929
110℃	0.1429	0.3272	0.6986	0.5002	1.0004	1.5006	2.4440	4.9319	8.3782	18.837
120℃	0.1120	0.2530	0.5437	0.3799	0.7597	1.1396	1.8424	3.7268	6.2340	13.874
130℃		0.1981	0.4274	0.2922	0.5844	0.8765	1.4051	2.8498	4.6969	10.350
140℃		0.1571	0.3392	0.2274	0.4549	0.6823	1.0834	2.2034	3.5807	7.8138
150℃		0.1261	0.2715	0.1791	0.3581	0.5372	0.8439	1.7215	2.7599	5.9657
160℃			0.2192	0.1425	0.2850	0.4275	0.6636	1.3582	2.1495	4.6029
170℃			0.1784	0.1146	0.2291	0.3437	0.5267	1.0814	1.6905	3.5868
180℃			0.1462	0.0930	0.1860	0.2790	0.4215	0.8686	1.3419	2.8212
190℃			0.1207	0.0762	0.1524	0.2286	0.3401	0.7034	1.0746	2.2387
200℃			0.1003	0.0630	0.1260	0.1889	0.2765	0.5740	0.8677	1.7913
210℃							0.2265	0.4719	0.7062	1.4447
220℃							0.1867	0.3907	0.5791	1.1740
230℃							0.1550	0.3257	0.4783	0.9608
240℃							0.1295	0.2732	0.3977	0.7917
250℃							0.1088	0.2305	0.3329	0.6566
260℃								0.1957	0.2804	0.5480
270℃								0.1670	0.2376	0.4600
280℃								0.1433	0.2025	0.3884
290℃								0.1236	0.1736	0.3297
300℃										0.2814

Dimensions in mm



Type No.

NTG - XXX - XXXX X - X X

① ② ③ ④ ⑤⑥

① Series name

② Zero-power resistance(R_{25}), for example:
502 ------ 5 KΩ
503 ------ 50 KΩ
104 ------ 100 KΩ

③ B value, for example:
3850 ------ B value is 3850K
3950 ------ B value is 3950K

④ Type of B value, for example:
A ------ $B_{0/50}$
B ------ $B_{25/50}$
C ------ $B_{25/85}$

⑤ Tolerance of R_{25}, for example:
1 ------ Tolerance of R_{25} is 1%
5 ------ Tolerance of R_{25} is 5%
0 ------ Tolerance of R_{25} is 10%

⑥ Tolerance of B value, for example:
1 ------ Tolerance of B value is 1%
2 ------ Tolerance of B value is 2%