



Micro Commercial Components

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## NTG Series

### Features

- DO-35 glass package
- High stability
- Wide range of operating temperature from -50°C up to 250°C
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Moisture Sensitivity: Level 1 per J-STD-020C

### 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

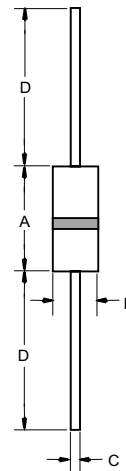
Symbol	Parameter	Value	Unit
R <sub>25</sub>	Rated zero-power resistance	10 <sup>2</sup> ~10 <sup>6</sup>	Ω
	Tolerance of R <sub>25</sub>	±1%, ±2%, ±3%, ±5%, ±10%	
B <sub>0/50</sub> B <sub>25/50</sub> B <sub>25/85</sub>	Range of B value	2000~5000	K
	Tolerance of B value	±0.5%, ±1%, ±1.5%	
	Dissipation factor*	≥ 2.0	mW
	Thermal time constant*	≤ 20	Sec.
	Rated power	250	mW
	Operating temperature range	-50 ~ +250	°C

\* In still air

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

## High Accuracy NTC Thermistors

### DO-35 GLASS



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

Temperature	NTG 502-32XX	NTG 502-34XX	NTG 103-35XX	NTG 103-33XX	NTG 103-39XX	NTG 403-35XX	NTG 503-40XX	NTG 104-36XX	NTG 104-41XX	Package
°C	KΩ	KΩ	KΩ	KΩ	KΩ	KΩ	KΩ	KΩ	KΩ	
-50	154.5	208.6		329.2						DO-35G
-40	88.85	112.86	249.6	188.4						
-30	52.85	63.73	140.0	111.3	176.98					
-20	32.43	37.40	80.36	67.74	97.10					
-10	20.48	22.72	47.73	42.45	55.35					
0	13.29	14.23	29.37	27.28	32.67	115.0	167.1	301.3	340.9	
10	8.839	9.181	18.68	17.96	19.91	73.87	100.5	190.1	204.0	
20	6.013	6.086	12.24	12.09	12.50	48.77	62.61	123.1	125.9	
30	4.179	4.132	8.221	8.313	8.049	33.00	40.07	81.71	79.77	
40	2.962	2.869	5.648	5.828	5.314	22.82	26.28	55.40	51.82	
50	2.138	2.032	3.958	4.161	3.589	16.10	17.69	38.32	34.47	
60	1.568	1.467	2.823	3.021	2.478	11.57	12.13	27.01	23.42	
70	1.169	1.073	2.047	2.229	1.745	8.460	8.498	19.39	16.27	
80	0.8838	0.7959	1.506	1.669	1.252	6.281	6.051	14.15	11.52	
90	0.6774	0.5975	1.124	1.266	0.9117	4.732	4.390	10.49	8.305	
100	0.5267	0.4533	0.8502	0.9735	0.6739	3.613	3.226	7.870	6.092	
110	0.4130	0.3514	0.6510	0.7579	0.5064	2.793	2.409	5.971	4.524	
120	0.3276	0.2756	0.5046	0.5965	0.3858	2.183	1.821	4.583	3.411	
130	0.2631	0.2186	0.3956	0.4750	0.2974	1.728	1.395	3.553	2.603	
140	0.2131	0.1751	0.3137	0.3821	0.2321	1.379	1.081	2.784	2.008	
150	0.1742	0.1418	0.2515	0.3103	0.183	1.108	0.8473	2.202	1.569	
160						0.8948	0.6707	1.758	1.238	
170						0.7256	0.5364	1.417	0.9878	
180						0.5918	0.4331	1.151	0.7944	
190						0.4862		0.9423	0.6454	
200						0.4020		0.7774	0.5280	
210						0.3346		0.6452	0.4349	
220						0.2803		0.5406	0.3611	
230						0.2362		0.4553	0.3018	
240						0.2001		0.3857	0.2539	
250						0.1705		0.3288	0.2149	
260								0.2817	0.1831	
280										
300										
R <sub>25</sub>	5.00K	5.00K	10.00K	10.00K	10.00K	40.00K	50.00K	100.00K	100.00K	
B <sub>25/50</sub>	3275	3470	3572	3380	3950	3508	4000	3697	4100	
B <sub>25/85</sub>	3324	3528	3630	3435	3983	3550	4048	3750	4140	

**Type No.**

NTG    XXX - XXXX X - X X  
 ①            ②            ③            ④            ⑤ ⑥

- ① Series name
- ② Zero-power resistance( $R_{25}$ ), for example:  
 502 ----- 5 K $\Omega$   
 503 ----- 50 K $\Omega$   
 104 ----- 100 K $\Omega$
- ③ B value, for example:  
 3850 ----- B value is 3850K  
 3950 ----- B value is 3950K
- ④ Type of B value, for example:  
 A ----- B<sub>0/50</sub>  
 B ----- B<sub>25/50</sub>  
 C ----- B<sub>25/85</sub>
- 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%



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 10Kpcs/Reel
(Part Number)-AP	Ammo Packing;5Kpcs/AmmoBox
(Part Number)-BP	Bulk;500pcs/Bag

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