

Radial Glass Thermistor – B Series



Introduction

The Betacurve Glass Series NTC Thermistors are the perfect choice for applications that require high stability and performance in harsh environmental conditions. The Glass A Series uses a hermetic glass encapsulation to allow improved resistance to humid environments. With an operating temperature range of -55°C to $+250^{\circ}\text{C}$, the se NTC Glass Sensors are suitable for elevated temperatures or applications where rapid thermal cycling are present. With resistance tolerances of $\pm 1\%$, $\pm 2\%$, $\pm 3\%$ or $\pm 5\%$, these NTC glass thermistors are suitable for the most demanding requirements.

Shape and Dimensions



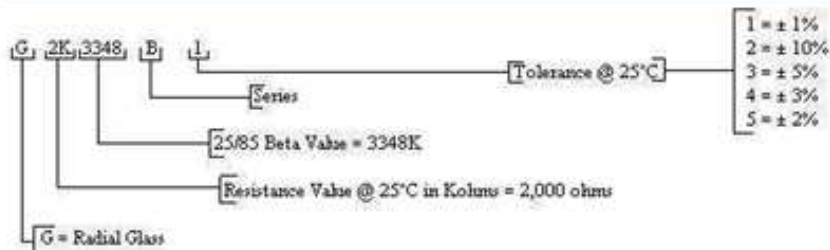
Features

- Operating temperature range from -55°C to $+250^{\circ}\text{C}$
- Glass hermetic encapsulation with high resistance to humid environments
- High-temperature stability
- Available in $\pm 1\%$, $\pm 2\%$, $\pm 3\%$, $\pm 5\%$ or $\pm 10\%$ tolerance at $+25^{\circ}\text{C}$
- Fast response time
- Dissipation constant (D.C) = $\sim 0.8\text{mW}/^{\circ}\text{C}$ in still air.

Applications

- Refrigeration control
- In environments where thermal shock and humidity are present
- Air conditioning systems
- Hot water boiler systems
- Temperature measurement and control
- Sensor for engine temperature control

Part Numbering System



Electrical Specifications

Part Number	Resistance @ 25°C (ohms)	Tolerance @ +25°C	Beta Value	Beta Tolerance	Dissipation Constant (Still Air @ +25°C)	T.C. Constant (Still Air)	T.C. Constant (Stirred Oil)
G2K3348B1	2000	$\pm 1\%$	3348	$\pm 2\%$	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G2K3499B1	2000	$\pm 1\%$	3499	$\pm 2\%$	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G5K3976B1	5000	$\pm 1\%$	3976	$\pm 2\%$	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G10K3435B1	10000	$\pm 1\%$	3435	$\pm 2\%$	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G10K3694B1	10000	$\pm 1\%$	3694	$\pm 2\%$	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G10K3976B1	10000	$\pm 1\%$	3976	$\pm 2\%$	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds

G30K3942B1	30000	± 1%	3942	± 2%	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G50K3976B1	50000	± 1%	3976	± 2%	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G100K4000B1	100000	± 1%	4000	± 2%	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G200K4261B1	200000	± 1%	4261	± 3%	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds
G500K4261B1	500000	± 1%	4261	± 3%	0.8mW/°C Typ.	4 ~ 5 seconds	0.3 ~ 0.4 Seconds

Reliability Information

Reliability Tests	Standard	Test Condition	Delta R
Storage in Dry Heat	IEC 60068-2-2	Storage temperature: + 250°C Duration: 1000 hours	< 3%
Storage in Damp Heat	IEC 60068-2-3	Temperature of air is 50°C & RH 95% Duration: 56 days.	< 2%
Rapid Temperature Cycling	IEC 60068-2-14	Lower Test Temperature -55°C Upper Test Temperature +200°C Number of Cycles 1000	< 2%

For details on the minimum order quantity (MOQ) of this product, please contact BetaTHERM or your local BetaTHERM representative

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