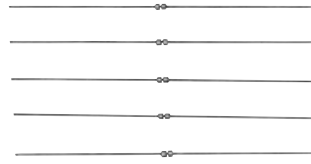


### Glass-sealed NTC Thermistors

Type: **ERTG**

Glass-sealed NTC Thermistors, Type ERTG, are miniature axial leaded type thermistors in hermetically sealed glass tube packages, featuring high accuracy and high reliability due to their unique construction.



#### ■ Features

- Wide Operating Range
  - Nickel plated lead type: -40 to +300 °C
  - Solder plated lead type: -40 to +125 °C
- Miniature axial lead type: (φ1.6×2.4 mm)
- Quick response
- Highly stable in long term operation
- RoHS compliant

#### ■ Handling Precautions

See Page 167

#### ■ Recommended Applications

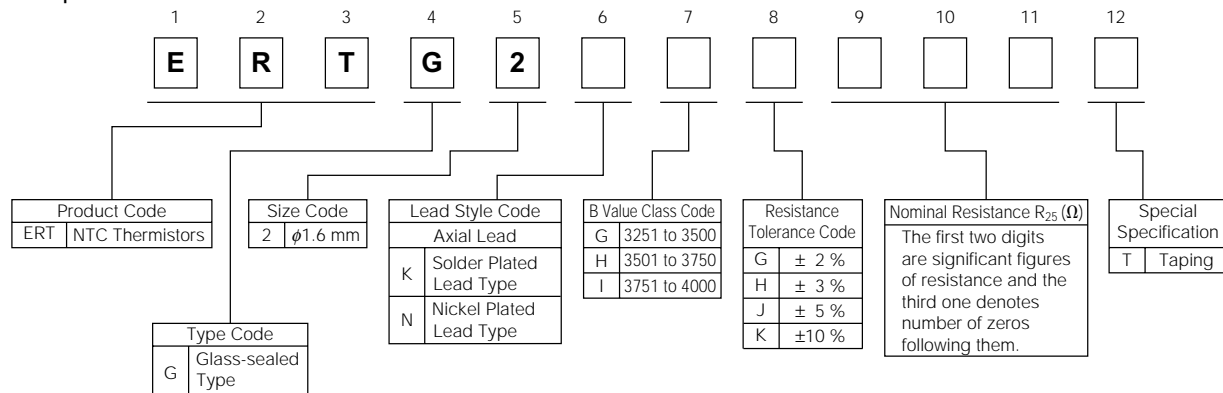
Temperature detection for:

- Cooking appliances
- Air conditioning equipment
- Automobiles

#### ■ Packaging Specifications

See Page 168

#### ■ Explanation of Part Numbers



#### ■ Ratings and Characteristics

Part No.	Zero-Power Resistance (@25 °C)	B Value		Thermal Time Constant	Operating Temperature Range	Dissipation Factor	Table A Curve No.
		25 °C/50 °C	25 °C/85 °C				
ERTG2KH□*502	5.0 kΩ	3550 K	(3615 K)	6 s	-40 to +125 °C (Solder Plated Type)	1.5 mW/°C	1
ERTG2KH□*802	8.0 kΩ	3550 K	(3615 K)				2
ERTG2KG□*103	10.0 kΩ	3380 K	(3435 K)				3
ERTG2KI□*203	20.0 kΩ	3950 K	(3980 K)				4
ERTG2KI□*333	33.0 kΩ	3950 K	(3980 K)				5
ERTG2NH□*502	5.0 kΩ	3550 K	(3615 K)	6 s	-40 to +300 °C (Nickel Plated Type)	1.5 mW/°C	1
ERTG2NH□*802	8.0 kΩ	3550 K	(3615 K)				2
ERTG2NG□*103	10.0 kΩ	3380 K	(3435 K)				3
ERTG2NI□*203	20.0 kΩ	3950 K	(3980 K)				4
ERTG2NI□*333	33.0 kΩ	3950 K	(3980 K)				5

\*Resistance Tolerance Code:

G	H	J	K
±2 %	±3 %	±5 %	±10 %

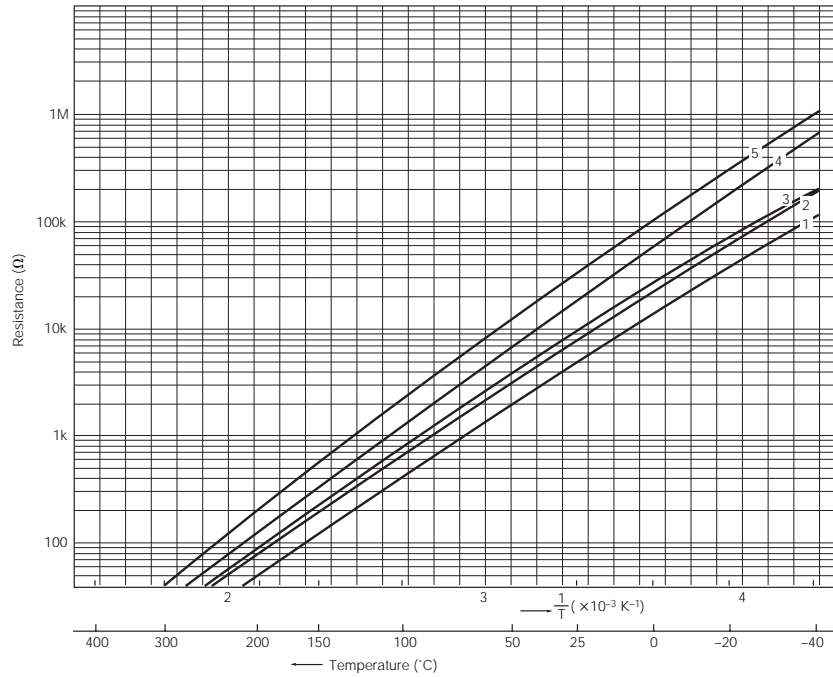
Tolerance of "B value": ±3 %

$$B(25\text{ °C}/50\text{ °C}) = \frac{\ln(R_{25}/R_{50})}{1/298.15 - 1/323.15}$$

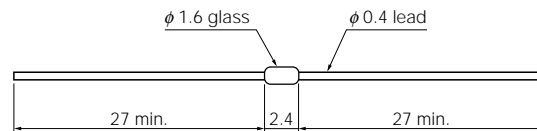
$$B(25\text{ °C}/85\text{ °C}) = \frac{\ln(R_{25}/R_{85})}{1/298.15 - 1/358.15}$$

R<sub>25</sub> = Resistance at 25.0 °C  
 R<sub>50</sub> = Resistance at 50.0 °C  
 R<sub>85</sub> = Resistance at 85.0 °C

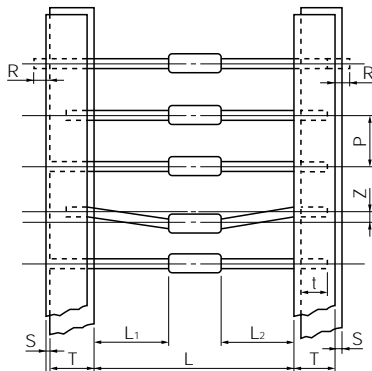
### ■ Resistance vs. Temperature (Table A)



### ■ Dimensions in mm (not to scale)



### ● Taping Type



L	$26.0^{+1.5}_{-0}$
P	$5.0 \pm 0.5$
$L_1 - L_2$	2.2 max.
Z	1.0 max.
R	0.2 max.
T	$6.0 \pm 1.0$
t	3.2 min.
S	1.0 max.