

GE Sensing

Features

- Designed for general purpose over-temperature protection
- Range of switch temperatures
 T_{NF} 140°F to 356°F (T_{NF} 60°C to 180°C)

- Small body diameter
- Fast response
- Limited heat conduction along steel wires
- Resistance-temperature characteristics conform to DIN 44 081 (T_{NF} 194°F to 320°F (T_{NF} 90°C to 160°C))

PTC Type YB

Thermometrics Over- Temperature Protection

PTC Type YB is a Thermometrics product. Thermometrics has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



Type YB Specifications

Description

A range of PTC thermistors with solder-coated steel wires and silicone resin coating.

Options

- Wire lengths 0.47 in to 1.57 in (12 mm to 40 mm) (± 0.04 in (± 1 mm))
- Other switch temperatures in the range 140°F to 356°F (60°C to 180°C)
- Color coding for switch temperature

Data

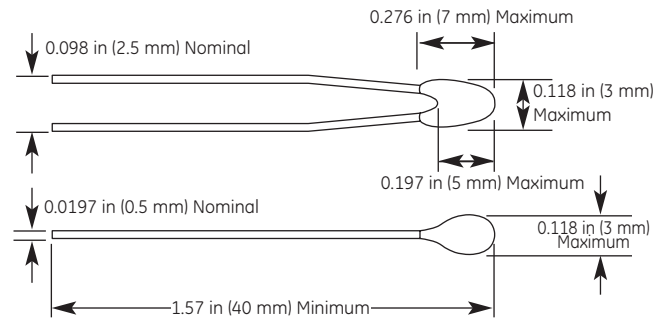
- **Operating Temperature**
 - (zero power): -25°C to 180°C or T_{NF} 15°C (whichever is greater)
 - (30 VDC): -13°F to 104°F (-25°C to 40°C)
- **Storage Temperature:** -13°F to 149°F (-25°C to 65°C)
 - **Maximum applied voltage:** 30 VDC
 - **Thermal time constant:** 15s (cooling) 2.4s (ambient change)
 - **Dissipation factor:** 2.2mW/K
 - **Isolation voltage:** 500 VDC
 - **Mass:** 0.18g
 - **Packing/MOQ:** 1000/box

Resistance-Temperature Specification Limits

Devices with $T_{NF} = 140^{\circ}\text{F}$ to 176°F (60 °C to 80°C)									
-20°C to $T_{NF}-20^{\circ}\text{C}$		77°F		$T_{NF}-5^{\circ}\text{C}$		$T_{NF}+5^{\circ}\text{C}$		$T_{NF}+23^{\circ}\text{C}$	
(25°C)									
Ω	VDC	Ω	VDC	Ω	VDC	Ω	VDC	Ω	VDC
≤ 250	2.5	≤ 100	0.2	≤ 570	2.5	≥ 570	2.5	≥ 10000	2.5

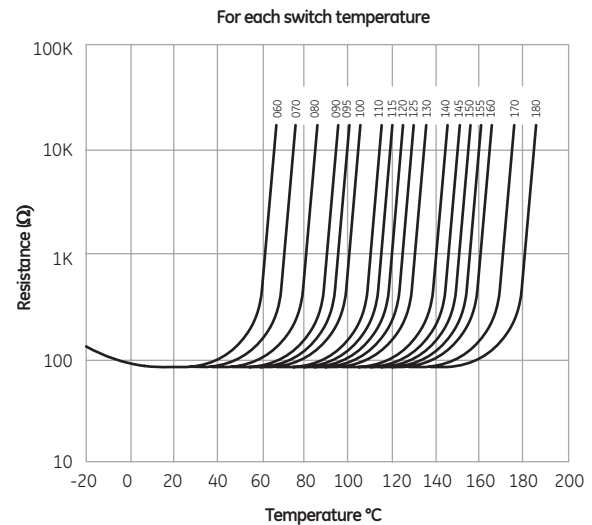
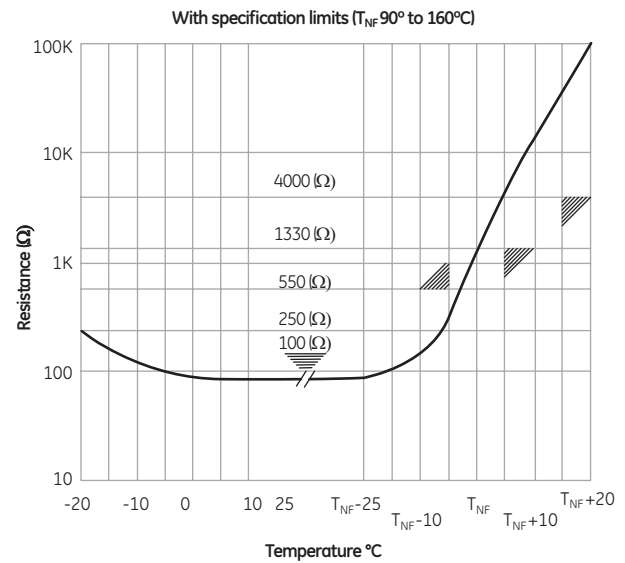
Devices with $T_{NF} = 194^{\circ}\text{F}$ to 320°F (90°C to 160°C)									
-20°C to $T_{NF}-20^{\circ}\text{C}$		77°F		$T_{NF}-5^{\circ}\text{C}$		$T_{NF}+5^{\circ}\text{C}$		$T_{NF}+15^{\circ}\text{C}$	
(25°C)									
Ω	VDC	Ω	VDC	Ω	VDC	Ω	VDC	Ω	VDC
≤ 250	2.5	≤ 100	0.2	≤ 550	2.5	≥ 1330	2.5	≥ 4000	7.5

Devices with $T_{NF} = 338^{\circ}\text{F}$ to 356°F (170°C to 180°C)									
-20°C to $T_{NF}-20^{\circ}\text{C}$		77°F		$T_{NF}-5^{\circ}\text{C}$		$T_{NF}+5^{\circ}\text{C}$		$T_{NF}+15^{\circ}\text{C}$	
(25°C)									
Ω	VDC	Ω	VDC	Ω	VDC	Ω	VDC	Ω	VDC
≤ 250	2.5	≤ 100	0.2	≤ 550	2.5	≥ 1330	2.5	≥ 4000	7.5



PTC Type YB dimensions

Typical Resistance-Temperature Characteristics



Type YB Specifications

Ordering Information

The code number to be ordered may be specified as follows:

Code	Type	Code	Style	Code	R ₂₅	Code	Switch temperature T _{NT} °C	Code	Function	Code	Packaging	Typical model number
Y	PTC Sensor material	B	Disc with solid radial wires and silicone coating	B	<100 Ω	060		T	Temperature sensor	N	Loose-packed	
						070						
						080						
						090						
						095						
						100						
						110						
						115						
						120						
						125						
						130						
						140						
						145						
						150						
						155						
						160						
						170						
						180						

Switch temperature and packaging are specified by the product code: e.g. YBB080TN

GE
Sensing



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