
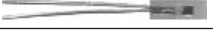
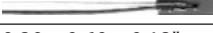
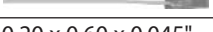
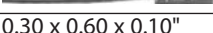
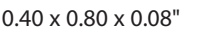




# Thermal-Tab™ and Thermal-Ribbon™ Sensors




Install these compact sensors anywhere for accurate point sensing and fast response. All Thermal-Tab modules use a thin-film RTD element. All Thermal-Ribbon models conform to EN60751 Class B tolerance when ordered with a PD platinum element.

- Fast response surface sensing in aerospace, medical and industrial devices
- Rugged lamination construction
- Polyimide, silicone rubber or Mylar™ insulation
- All models are RoHS compliant

## Thermal-Tab Specifications

Dimensions W x L x T <sub>max</sub>	Element options	Insulation	Temperature range	Leadwires	Time constant*	Features	Model
0.20 x 0.50 x 0.08" (5 x 12 x 2 mm) 	PD, PF, PW	Polyimide with elastomer cover coat	-50 to 155°C -58 to 311°F	AWG 26, PTFE insulated	0.8 sec.	Stocked for immediate shipment	S665
0.20 x 0.60 x 0.08" (5 x 15 x 2 mm) 	PD, PF, PW, PS, NB, NA, NJ	Polyimide	-50 to 200°C -58 to 392°F	AWG 26, PTFE or polyimide insulated	1.0 sec.	Platinum models in stock	S17624
0.20 x 0.60 x 0.08" (5 x 15 x 2 mm) 	PD, PF, PW, PS	Polyimide film	-50 to 260°C -58 to 500°F	AWG 26, PTFE or polyimide insulated	0.4 sec.	Highest temperature capability	S100820
0.20 x 0.60 x 0.12" (5 x 15 x 3 mm) 	PD, PF, PW	Silicone rubber with elastomer cover and foil backing	-50 to 155°C -58 to 311°F	AWG 24, Silicone insulated	1.3 sec.	Waterproof; suitable for continuous immersion	S667
0.20 x 0.60 x 0.045" (5 x 15 x 1.15 mm) 	PD, PF, PW	Polyimide film	-50 to 200°C -58 to 392°F	AWG 26, PTFE or polyimide insulated	0.6 sec.	Thinnest profile	S100725
0.30 x 0.60 x 0.10" (7 x 15 x 2.5 mm) 	PD, PF, PW, PS, NB, NA, NJ	Polyimide film	-50 to 200°C -58 to 392°F	AWG 22, PTFE or polyimide insulated	1.2 sec.	Heavier leadwire for applications requiring ruggedized design	S100724
0.40 x 0.80 x 0.08" (10 x 20 x 2 mm) 	PD, PF, PW, PS, NB, NA, NJ	Polyimide film	-50 to 200°C -58 to 392°F	AWG 26, PTFE or polyimide insulated	0.9 sec.	Larger surface area for easier handling and maximum adhesive bond	S100723
0.40 x 0.80 x 0.08" (10 x 20 x 2 mm) 	PD, PF, PW, PS, NB, NA, NJ	Silicone rubber	-50 to 220°C -58 to 428°F	AWG 26, PTFE or polyimide insulated	1.5 sec.	High temperature rating, available with wide range of element options	S100721

## Thermal-Ribbon Specifications

0.20 x 1.50 x 0.030" (5.1 x 38.1 x 0.8 mm) 	FA	Polyimide	-200 to 200°C -328 to 392°F	AWG 34, PTFE insulated	0.15 sec.	Wire-wound nickel-iron for high resistance in small package	S38
0.30 x 0.30 x 0.025" (7.6 x 7.6 x 0.7 mm) 	PD, PE	Polyimide with foil backing	-200 to 200°C -328 to 392°F	AWG 28, PTFE insulated	0.15 sec.	Wire-wound element	S651
0.75 x 0.75 x 0.04" (19 x 19 x 1.0 mm) 	FA	Mylar	-200 to 150°C -328 to 302°F	AWG 30, PTFE insulated	0.3 sec.	Wire-wound nickel-iron flat element for high resistance	S25

Notes: T<sub>max</sub> is measured over the lead bulge. \*Time constant is in water at 1 m/sec.

## Specifications, continued

Leadwire insulation codes	
S25, S38, S651, S665, S667	Leave blank
S17624, S100721, S100723, S100724, S100725, S100820	T = PTFE insulated wires      K = Polyimide insulated wires

Specifications subject to change

## Sensing elements

Sensing element specifications**	Code	
Platinum (0.00385 TCR) (EN60751, Class B)	100 $\Omega$ $\pm$ 0.12% at 0°C	PD
Platinum (0.00385 TCR)	100 $\Omega$ $\pm$ 0.22% at 0°C	PE
Platinum (0.00385 TCR)	1000 $\Omega$ $\pm$ 0.12% at 0°C	PF
Platinum (0.00375 TCR)	1000 $\Omega$ $\pm$ 0.12% at 0°C	PW
Platinum (0.00385 TCR)	10,000 $\Omega$ $\pm$ 0.12% at 0°C	PS
Nickel-iron (0.00518 TCR)	604 $\Omega$ $\pm$ 0.26% at 0°C	FA
Nickel (0.00618 TCR) (DIN43760 NI100, Class B)	100 $\Omega$ $\pm$ 0.22% at 0°C	NB
Nickel (0.00672 TCR)	120 $\Omega$ $\pm$ 0.50% at 0°C	NA
Nickel (0.00618 TCR) (DIN43760 NI1000, Class B)	1,000 $\Omega$ $\pm$ 0.22% at 0°C	NJ

\*\* See table on previous page for element options on each model.

### Waterproof model

Model S667 is waterproof and suitable for continuous immersion. Use it to monitor the temperature of water in a tank or container, or on equipment that must withstand wash-down or immersion.

Check with Minco for suitability in other liquids.



## Specifications and order options

S17624	Model number from table
PD	Sensing element from table
Z	Number of leads: Y = 2 leads      Z = 3 leads (N/A on S25, S38) X = 4 leads (N/A on S25, S38 or S665/S667)
T	Leadwire insulation code from table at left
24	Lead length in inches: S665/S667: 60" max.
A	Adhesive backing: A = No adhesive B = Pressure-sensitive adhesive (PSA)
Stop here for all models except S665 or S667. For models S665 and S667, add:	
C	Compliance: C = RoHS Compliance
S665PDY40AC = Sample part number	

Notes: PSA reduces temperature range to -20 to 177°C (-4 to 350°F) and adds 0.005" (0.1 mm) to thickness.

### Custom Thermal-Ribbon designs

Minco can custom-wind Thermal-Ribbon elements in virtually any shape and size. We can profile sensing elements to provide increased sensitivity in selected zones, and provide packaging to perfectly fit your applications.

Contact Minco Sales and Customer Service today to discuss your application.



**STOCKED PARTS AVAILABLE**

THERMAL-  
RIBBONS

Specifications subject to change

