

# AIRPAX® TSP

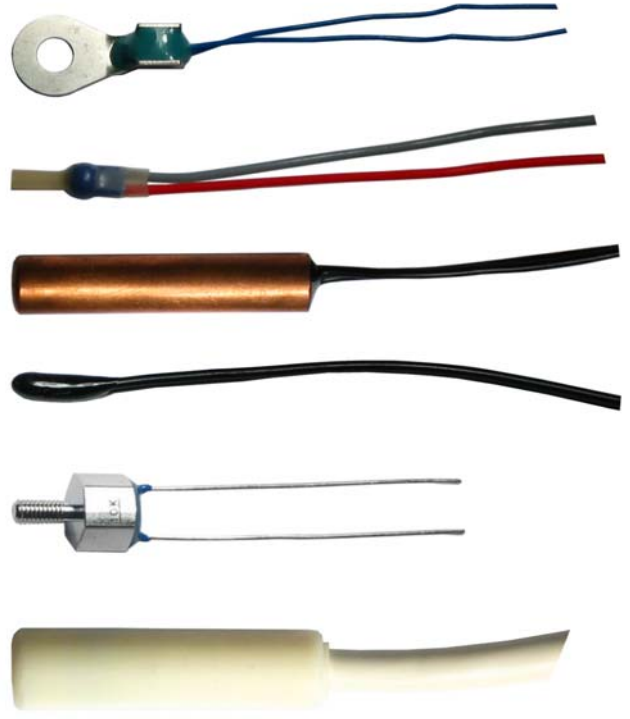
## VeriSense™ 3700 Low-Cost Temperature Sensors

### Features

- ▶ Low-cost, reliable construction
- ▶ Surface or air sensing configurations
- ▶ Various resistances & tolerances available
- ▶ Accurate, high quality temperature measurement


### Applications

- ▶ Electric motors
- ▶ Transformers
- ▶ HVAC & Refrigeration
- ▶ Telecom & Datacom enclosures
- ▶ Battery management
- ▶ Heat Sinks
- ▶ Power Supplies



The VeriSense™ 3700 is a family of reliable, low-cost thermistor assemblies ideal for a wide variety of applications that require surface and air temperature sensing.

**3700 A**




**Temperature Tolerance**  
25°C ± 0.6°C

**R<sub>25</sub> (Ω)**  
5K, 10K, 30K ± 2%

**β<sub>25/100</sub> (K)**  
3988 ± 1% (5KΩ & 10KΩ)  
3964 ± 1% (30KΩ)

**Small Ring Lug**

**3700 B**



**Temperature Tolerance**  
25°C ± 2.5°C

**R<sub>25</sub> (Ω)**  
32.762K ± 10%

**R<sub>100</sub> (Ω)**  
1.8K ± 10%

**β<sub>25/100</sub> (K)**  
4300 ± 1.5%

**Shrink Tube Insulation**

**3700 C**




**Temperature Tolerance**  
25°C ± 0.7°C

**R<sub>25</sub> (Ω)**  
10K ± 3%

**β<sub>25/100</sub> (K)**  
3988 ± 0.5%

**Epoxy Resin Encapsulation**

**3700 D**




**Temperature Tolerance**  
25°C ± 0.7°C

**R<sub>25</sub> (Ω)**  
10K ± 3%

**β<sub>25/100</sub> (K)**  
3988 ± 0.5%

**Copper Tube**

**3700 E**




**Temperature Tolerance**  
25°C ± 2.5°C

**R<sub>25</sub> (Ω)**  
10K ± 10%

**β<sub>25/100</sub> (K)**  
4300 ± 3%

**M3 Screw-Type Case**

**3700 F**



**Temperature Tolerance**  
25°C ± 0.7°C

**R<sub>25</sub> (Ω)**  
5K ± 2%

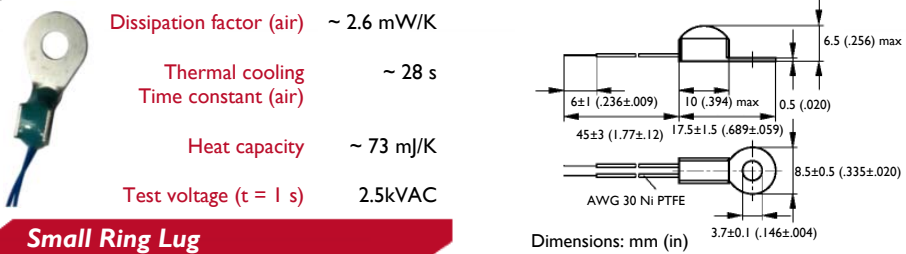
**β<sub>25/100</sub> (K)**  
3980 ± 1.5%

**Molded Plastic Case**

PICTURES DO NOT REPRESENT ACTUAL SIZE

**Small Ring Lug**

Dissipation factor (air) ~ 2.6 mW/K  
 Thermal cooling Time constant (air) ~ 28 s  
 Heat capacity ~ 73 mJ/K  
 Test voltage (t = 1 s) 2.5kVAC

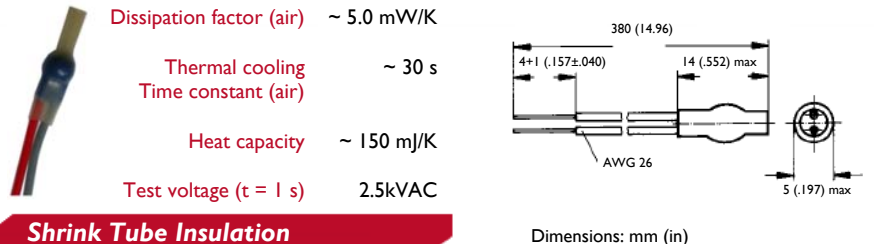


Dimensions: mm (in)

| $R_{25} (\Omega)$ | $\beta_{25/100} (K)$ | Ordering Code |
|-------------------|----------------------|---------------|
| 5 k $\pm$ 2%      | 3988 $\pm$ 1%        | 3700A1        |
| 10k $\pm$ 2%      | 3988 $\pm$ 1%        | 3700A2        |
| 30k $\pm$ 2%      | 3964 $\pm$ 1%        | 3700A3        |

**Shrink Tube Insulation**

Dissipation factor (air) ~ 5.0 mW/K  
 Thermal cooling Time constant (air) ~ 30 s  
 Heat capacity ~ 150 mJ/K  
 Test voltage (t = 1 s) 2.5kVAC

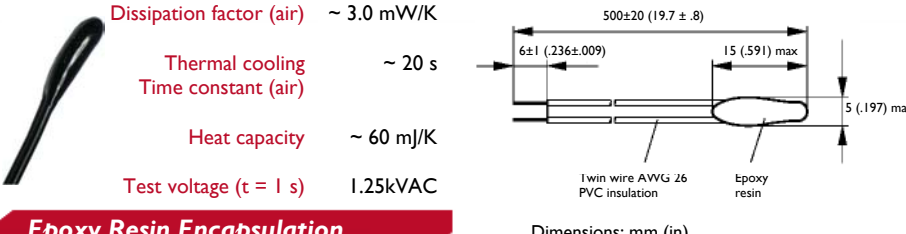


Dimensions: mm (in)

| $R_{25} (\Omega)$  | $\beta_{25/100} (K)$ | Ordering Code |
|--------------------|----------------------|---------------|
| 32.762 k $\pm$ 10% | 4300 $\pm$ 1.5%      | 3700B1        |

**Epoxy Resin Encapsulation**

Dissipation factor (air) ~ 3.0 mW/K  
 Thermal cooling Time constant (air) ~ 20 s  
 Heat capacity ~ 60 mJ/K  
 Test voltage (t = 1 s) 1.25kVAC

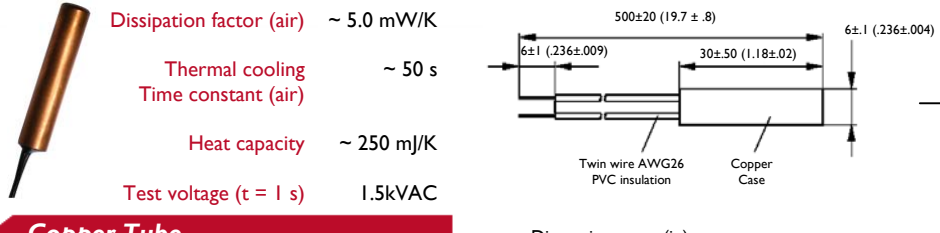


Dimensions: mm (in)

| $R_{25} (\Omega)$ | $\beta_{25/100} (K)$ | Ordering Code |
|-------------------|----------------------|---------------|
| 10k $\pm$ 3%      | 3988 $\pm$ 0.5%      | 3700C1        |

**Copper Tube**

Dissipation factor (air) ~ 5.0 mW/K  
 Thermal cooling Time constant (air) ~ 50 s  
 Heat capacity ~ 250 mJ/K  
 Test voltage (t = 1 s) 1.5kVAC

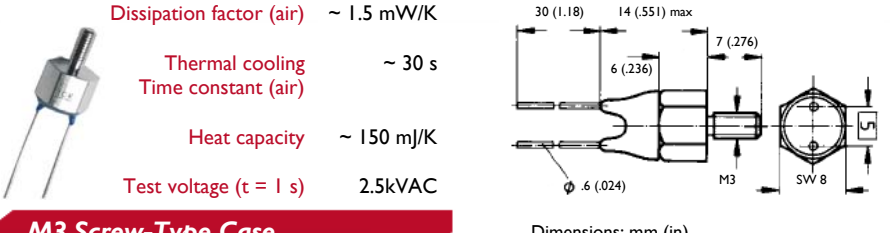


Dimensions: mm (in)

| $R_{25} (\Omega)$ | $\beta_{25/100} (K)$ | Ordering Code |
|-------------------|----------------------|---------------|
| 10 k $\pm$ 3%     | 3988 $\pm$ 0.5%      | 3700D1        |

**M3 Screw-Type Case**

Dissipation factor (air) ~ 1.5 mW/K  
 Thermal cooling Time constant (air) ~ 30 s  
 Heat capacity ~ 150 mJ/K  
 Test voltage (t = 1 s) 2.5kVAC

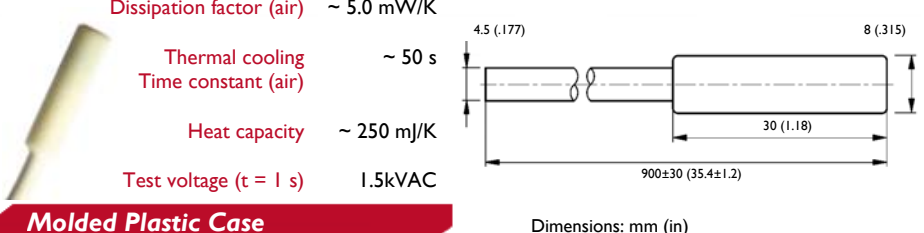


Dimensions: mm (in)

| $R_{25} (\Omega)$ | $\beta_{25/100} (K)$ | Ordering Code |
|-------------------|----------------------|---------------|
| 10k $\pm$ 10%     | 4300 $\pm$ 3.0%      | 3700E1        |

**Molded Plastic Case**

Dissipation factor (air) ~ 5.0 mW/K  
 Thermal cooling Time constant (air) ~ 50 s  
 Heat capacity ~ 250 mJ/K  
 Test voltage (t = 1 s) 1.5kVAC



Dimensions: mm (in)

| $R_{25} (\Omega)$ | $\beta_{25/100} (K)$ | Ordering Code |
|-------------------|----------------------|---------------|
| 5k $\pm$ 2%       | 3988 $\pm$ 1.5%      | 3700F1        |