

# **PRODUCT NEWS**

### **Auburn Manufacturing Company**

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## **TF1860 SERIES**

### **Thermally Conductive Silicone-Coated Fabric**

**ThermaCool® TF1860 from Auburn** series are thermally conductive silicone-coated fiberglass fabrics offering high temperature resistance and conformability as a low-cost heat sink gasket. The fiberglass fabric supports the silicone rubber and aids in dimensional stability and cut-through resistance.

**The ThermaCool TF1860 series** is specially designed to provide the following features:

- Thermal conductivity rating of .9 W/mK (low-cost fabric)
- Clean/low-cost replacement for thermal grease
- UL listing simplifies complete electronic system approval (94 V-O)
- Electrically isolates power source from heat sink device
- Material can be ordered with pressure-sensitive adhesive on one side for ease in placement

### **Available Sizes**

Standard thickness: 0.0075 and .009 in. (.19 and .22 mm) Master roll size: 36 in. x 36 yd. (914 mm x 33 meters)

### **Available Sizes**

Standard thickness: 0.007 and 0.009 in. (.18 and .22 mm) Master roll size: 18 in. x 36 yd. (457 mm x 33 meters)

### Thermal Interface Gasket Material

### Auburn Manufacturing Co.

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### **Applications**

- Telecommunications
- Computers
- Automotive electronics
- Electrical insulation
- Military
- Medical
- Electronic modules
- Power supplies

### **TF1860 Series** — Properties

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

Property	Test Method	TF1867	TF1879
Color	Visual	Gray	Gray
Thickness, nominal in.	ASTM D374	.0075	.009
Thermal Conductivity: W/mK	ASTM E1530 @ 300 psi	0.90	0.90
Thermal Impedance: °C in.2 /W (1/16")	ASTM E1530	0.31	0.39
Break Strength: psi	ASTM D412	90	100
Elongation: %	ASTM D412	< 5	< 5
Dielectric Strength: volts/mil	ASTM D2240	2500	3000
Volume Resistivity: ohm-cm	ASTM D149	1×10 <sup>14</sup>	1x10 <sup>14</sup>
Operating Temperature: °F	ASTM D257	-80 to +400	-80 to +400
UL Listing Recognition	UL94	94-VTM-0	94 VTM-1
Hardness Shore A		85	85

### **Options (subject to minimum order requirements)**

Adhesive base: Low tack silicone pressure-sensitive adhesive and solvent-resistant acrylic pressure-sensitive adhesive on one side. (PSA increases thermal resistance by 0.05 C/W.)

**Important Instructions:** Because Auburn cannot anticipate or control every potential application, we strongly recommend testing of this product under individual application conditions prior to commercial use.

**For PSA options:** Surfaces must be clean and free of oil, grease, moisture, dust and dirt. Isopropyl alcohol is good for cleaning the surface.

Recommended service temperature of base fabric is: -80°F to 400°F (-62°C to 204°C).

**Shelf Life:** 10 years after the date of manufacture when stored in original packaging at temperatures up to 95°F (35°C) and 70% relative humidity (see applicable data sheets for pressure-sensitive adhesive option).

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