

#### **Product Data Sheet**

Thermally Conductive Pressure Sensitive Adhesive

P/N: T20 (0.002", 0.05mm)

# **FASTELTACK T20**

# **T20 Product Description**

FastelTack T20 is a free standing thermally conductive pressure sensitive adhesive designed for thermal management applications such as IC Chips, Heat Sinks, LED/Heat Sink Mount and Battery Attachment due to its low thermal resistance and quick assembly time. T20 offers a high degree of substrate conformability and adhesion to achieve excellent thermal performance even at hand applied pressure levels. T20 eliminates the need for fasteners or clamping devices due to its quick stick, long term adhesion characteristics.

T20 offers excellent long term adhesion to a broad range of substrates. Available in a 2 mil thick product, T20 is an unsupported pressure sensitive adhesive supplied on release liner in continuous rolls, slit rolls, die cuts formats or pre-laminated to a wide range of substrates including aluminum, copper, stainless steel, PET Films, polyimide films as well as customer required substrates.

#### **Product Features**

Excellent Thermal Performance Replacement for Thermal Greases Non-silicone and Halogen Free Quick Assembly and Long Term Adhesion

## **T20 Product Characteristics / Formats**

Adhesive Type: Thermally Conductive PSA

T20 Adhesive Thickness: 0.002" (0.05mm)

Adhesive Color: Opaque White

**Liner Type:** Polyester Release Liners

**Liner Thickness:** 2 Mil (0.05mm) - Typical

**Delivery Formats:** Continuous Log or Slit Rolls / Die Cuts

**Substrate Pre-lamination:** Yes, contact Fastel to learn more about substrate lamination options

Fastel Die Cuts: Individual die cut pieces

Continuous die cut rolls

## T20 Typical Properties / Performance

**Continuous Operating Temperature:** -20°C to 120°C

**Thermal Conductivity:** 0.7 W/m-K

Thermal Impedance: 0.25 °C in<sup>2</sup>/W @ 20 PSI

0.15 °C in²/W @ 50 PSI 0.14 °C in²/W @ 100 PSI

Breakdown Voltage: 2440 Vac Volume Resistivity: > 10<sup>15</sup>

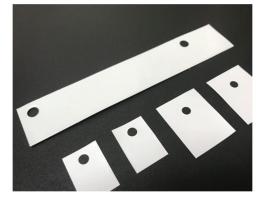
90° Peel (against aluminum)(1hr dwell): 1.6 lb/in width Lap Shear (against aluminum)(1hr dwell): 36 PSI

For maximum adhesion, make sure all bonding surface are clean and free of debris. The firmer the application pressure and the greater the bonding area, a stronger bond will be achieved. Maximum adhesion will typically be achieved within 24 hours as the adhesive wets out the bonding surfaces. Applying light heat can accelerate the time to reach full strength Liner Peel: for best results, it is recommended to release liners at close to a 180° peel as possible using steady and even speed.

## **Samples or More Information**

For more information or to receive samples for testing, please contact us toll free at 1-888-989-3832 (US Only) +1-949-369-7676 (international) or e-mail info@timtelthermal.com

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#### **Popular Mounting Surfaces**

Aluminum / Copper / Stainless Anodized Metal Surfaces FR Substrates Polyimide and Polyester Films

#### **T20 Construction**

Clear Cover Release Line

T20 Adhesive (0.002")

**Base Release Line** 

Pre-Lamination Substrate Options (single or double sided)

Aluminum Foil
Copper Foil
Stainless Steel Foil
Kapton MT or MT+ Film
Polyester Film
Customer Defined Substrates

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