

TIM-818

HIGH STRENGTH, THERMALLY CONDUCTIVE ADHESIVE

TIM-818 is a high strength, thermally conductive, modified acrylic adhesive. This tough adhesive has an excellent heat distribution for thermally sensitive components with controlled strength for service repair provide perfect replacements to replace mechanical chips, fasteners, epoxies, silicone, tapes and other methods of securing electronic heat generating devices and heat sinks. Thermally conductive room temperature cure adhesive that effectively bonds to most materials used in the electronic industry.

TYPICAL HANDLING PROPERTIES:

Base	Modified Acrylic
Cure	Activator
Color	White
Specific Gravity	1.51
Viscosity, 2.5 RPM	>1000,000 cPs
Flash point	200°F
Toxicity	Low
Shelf Life	1 Year

TYPICAL CURED PROPERTIES:

Tensile Strength at Break (ASTM D638). PSI	1860
Elongation (ASTM D638)	0.92%
Out gassing (E595) TLM	45%
CVCM	0.15%
Service Temperature range, °C	-54 to 149
Thermal Conductivity, Btu.in/hr. °F.Ft ²	4.6
Coefficient of Thermal Expansion, (cm/cm/°C)	1.1 x 10 ⁻⁴
Dielectric Strength.	
Volts/mil (ASTM D 149).	570
Dielectric Constant, (ASTM D 150).	
100Hz	6.49
1000HZ	5.87
1MMHZ	5.23
Dissipation Factor, (ASTM D150).	
100Hz	0.10
1000HZ	0.046
1MMHZ	0.031
Volume Resistivity.	
Ohm-cm. (ASTM D257)	1.3 x 10 ¹²
Surface Resistivity.	
Ohms. (ASTM D 257).	5.1 x 10 ¹³

TYPICAL CURING PROPERTIES:

TIM-818 repairable strength, when used with activator, fixtures at room temperature in less than five minutes. Full strength is developed in 4 to 12 hours and fillets become dry to touch in 24 hours. It is not recommended to use TIM-818 without the use of activator.

INSTRUCTIONS FOR USE:

1. For best performance bond surfaces should be clean and free from grease.
2. Use applicator to apply the activator to the surface to be bonded.
3. After the solvent evaporates, the active ingredients will appear wet, and will remain active for up to two hours after application. Contamination of the surface before bonding should be prevented.
4. Apply adhesive to the unactivated surface
5. Secure the adhesive applied to the part or heat sink should be limited to the amount necessary to fill the bond and just enough to give a small fillet.
6. The dispensing or application of the adhesive should be done as to minimize air entrapment within the bondline.
7. The successful application of this product depends on accurate dispensing on the parts to be bonded.

FOR INDUSTRIAL USE ONLY:

Practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).