

CTS Proprietary A01 Laminating Adhesive **Technical** Data

CTS Proprietary Laminating Adhesive - Part Number A01

FEATURES

- Superior Temperature Resistance
- Excellent Solvent Resistance
- UV Resistance
- Long Term Aging Properties
- Low Out-gassing Properties

APPLICATIONS

- Mounting Heat Sinks to Processors
- Mounting Heat Spreaders to Controllers and PC Boards



TAPE DESCRIPTION

• Total thickness = 0.005 in.:

0.001 thick thermally filled carrier with 0.002 in. thick high-temperature acrylic film on each side

- Shipped with peel-off cover tape for easy handling.
- Specify "/A01" when ordering the corresponding heat sink.

PHYSICAL PROPERTIES

Property	Value	Test Method
Military Specification	Mil-P-19834C	
Lap Shear Strength	36.5 psi	
Tensile Strength @ 100°C	40.0 psi	
Thermal Conductivity	0.0061 W/in°C	
Thermal Impedance	0.82 °C-in.2 / W	
Dielectric Strength	4,000 V/mil	
Peel Adhesion		
Stainless Steel	78 oz./in.	ASTM D-330 (modified), 72 Hour Dwell (90° peel, 12 in./min.); 2 mil Aluminum to Various Surfaces
Polycarbonate	53 oz./in.	
Polypropylene	11 oz./in.	

ENVIRONMENTAL PERFORMANCE

Feature	Performance	
Bond Build-up	The bond strength of the adhesive increases as a function of time and temperature.	
Humidity Resistance	High humidity has a minimal effect on adhesive performance. Bond strengths are generally higher after exposure for 7 days @ 32°C and 90% Relative Humidity.	
U.V. Resistance	Adhesive is not adversely affected by exposure to U.V.	
Water Resistance	After 100 hours in water @ ambient temperature, the bond exhibits an increase in strength.	
Temperature Cycling	Increased bond strength after temperature cycling – four cycles of: 4 hours @ +70°C, 4 hours @ -29°C, 16 hours @ 25°C	
Chemical Resistance	Parts hold after exposure to: Gasoline, Oil, Freon™ TF, Sodium Chloride Solution, Mild Acids and Alkalis.	
Heat Resistance	Usable @ 232°C for short duration (Hours) Usable @ 149°C for longer durations (Weeks)	
Shelf Life	One year Shelf Life @ 22°C and 50% RH. (Storage in sealed plastic bag is recommended).	

Note: The properties defined are based on the attachment of impervious materials to an aluminum test surface.

Page 1 of 1 January 2007

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