

Internet Address:
www.emersoncuming.com

TYPICAL PROPERTIES	TEST METHOD	DESCRIPTION
Color: White	PT-56	Ablefilm® 550K thermally conductive epoxy adhesive film is designed for substrate attach and heat sink bonding.
Carrier: Glass Fabric		
Work Life @ 25°C: 6 months	PT-54	
Cure Condition: 1/2 hour @ 150°C Cure Option: 2 hours @ 125°C		
Lap Shear Strength	MT-6	This adhesive film provides four times the thermal conductivity of conventional adhesive films.
Al to Al @ 25°C: 3300 psi Au to Au @ 25°C: 3100 psi		
Volume Resistivity: 7.2×10^{12} ohm-cm	PT-47	Designed to overcome the problems associated with bonding gold-plated surfaces, this adhesive film offers exceptional bond strength to gold and other difficult-to-bond metals.
Dielectric Strength: 1000 volts/mil	PT-49	
Dielectric Constant: 5.7 (@ 1KHz)	PT-48	
Dissipation Factor: 0.02 (@ 1KHz)	PT-48	
Glass Transition Temperature (Tg): 102°C	MT-9	This adhesive film is also available in a low temperature cure version.
Coefficient of Thermal Expansion (TMA)	MT-9	
Below Tg: 50 ppm/°C Above Tg: 300 ppm/°C		
Weight Loss (TGA) @ 300°C: 0.37%	PT-20	
Thermal Conductivity @ 121°C: 0.80 W/m°K	PT-40	
Storage Life	PT-36	
@ 5°C: 9 months @ -40°C: 1 year		

The figures shown above are typical values only. If you need to write a specification, please request our current Standard Release Specification.

INSTRUCTIONS

Place pre-cut adhesive film between clean surfaces to be bonded. Assemble components. Apply spring loaded clamp to provide a continuous pressure of at least 2-10 psi during cure cycle.

Place assembly in a preheated oven and cure at the recommended cure schedule.

AVAILABILITY

Ablefilm® 550K adhesive film is available in sheet stock, slit rolls, or die cut preforms dimensioned to customer drawings.

Ablefilm adhesive film can be die cut to customer specifications. Tolerances are as close as + 0.005 inch in length or width and + 0.001 inch in thickness. This adhesive film is supported by a 1-mil thick glass fabric.

STORAGE

Ablefilm 550K adhesive film may be stored at room temperature (25°C maximum) for 6 months. Standard refrigeration (5°C) is recommended for optimum shelf life. At 5°C, shelf life is 9 months. At -40°C, storage life is 1 year.

NATIONAL STARCH MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE SUITABILITY OF THESE MATERIALS FOR USE IN IMPLANTATION IN THE HUMAN BODY OR FOR ANY OTHER USE. These materials are not designed or manufactured for use in implantation in the human body. National Starch has not performed clinical testing of these materials for implantation. National Starch has neither sought, nor received, approval from the FDA for the use of these materials in implantation in the human body.

■ Underfills Solder Alternatives C.O.B. Materials
Film Adhesives Thermal Interfaces ■



■ Encapsulants Coatings Adhesives
Electrically Conductive Coatings and Adhesives ■

■ **Europe**
Nijverheidsstraat 7
B-2260 Westerlo
Belgium
☎ : +(32)-(0) 14 57 56 11
Fax: +(32)-(0) 14 58 55 30

■ **North America**
46 Manning Road
Billerica, MA 01821
☎ : 978-436-9700
Fax : 978-436-9701

■ **Asia-Pacific**
100 Kaneda, Atsugi-shi
Kanagawa-ken, 243-0807
Japan
☎ : (81) 46-225-8815
Fax : (81) 46-222-1347