



AI TECHNOLOGY INC
 70 Washington Road
 Princeton Jct., NJ 08550
 (609) 799-9388 fax (609) 799-9308
 E-Mail: ait@aitechnology.com
 Internet: <http://www.aitechnology.com>

THERMOPLASTIC FILM
TP7150

TYPICAL PROPERTIES*

Electrical Resistivity (25 °C/As Is)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-55
Lap-Shear Strength	>1000 psi >6.9 N/mm ²
Device Push-off Strength	>1000 psi >6.9 N/mm ²
Cured Density (gm/cc)	1.5
Hardness (Type)	60 (A)
Thermal Conductivity	1.5 Btu-in/hr-ft ² -°F 0.21 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	80
Tensile Modulus:	
Maximum Continuous Operation Temp. (°C)	150

* Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is intended to be used in manufacturing and in the final product.

Instant Bonding at 190°C
Flexible Adhesive at -55°C Tg
Melt Rework at 175°C

IDEAL FOR:

- Large Area Bonding
- Automated Bonding Processes
- Die, Component and Substrate Attaches
- Reworkable Bonding

DESCRIPTION:

TP7150 is an unfilled, high bond strength thermoplastic film adhesive designed for bonding die, component, and substrate. It forms instant bond upon melt-flow at 175-190°C @ 5-10 psi with more than 1,000 psi bond strength. The dry, tack-free handling of the film makes it suitable for automated assembly.

TP7150 is designed for bonding parts that may be operating at 150°C continuously. If excessive tensile stress is expected at temperature above 150°C, additional mechanical support may be considered.

AVAILABILITY:

TP7150 is available in sheet sizes or as custom preforms. Standard thicknesses are 0.003" and 0.006". Special thicknesses are available.

APPLICATION PROCEDURES:

- (1) Cut or pre-cut to desired size.
- (2) Remove film from protective paper.
- (3) Place between substrate and part.
- (4) Apply pressure and reflow material.

REFLOW TEMPERATURES:

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
>190°C	0.5 sec	5-10 psi

SHELF LIFE:

<u>Storage temperature</u>	<u>Shelf Life</u>
25°C	1 yr

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