



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>

Thermally Conductivity
Instant "Melt-Bondable"
Dry Film Adhesive
Ambient Storage

IDEAL FOR:

- High Volume, Automated Assemblies
- Heat-Sink
- Component Attach
- Substrate Attach

DESCRIPTION:

TP7155 is an aluminum oxide filled, medium bond strength thermoplastic film adhesive designed for bonding die, component, and substrate. It has good thermal conductivity. The dry, tack-free handling of the film makes it suitable for automated assembly.

TP7155 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:

TP7155 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.

CAUTION: This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer SDS for more details. The information contained herein is believed to be reliable. All recommendations or suggestions are made without guarantee inasmuch as conditions and methods of commercial use are beyond our control. 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 to be used in manufacturing and in the final product. Under no circumstance shall AI Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

While AI Technology owns all proprietary rights of material formulations of its products, specific usage in the manufacturing of certain products may involve patent rights of other companies.

THERMOPLASTIC FILM
TP7155

TYPICAL PROPERTIES*

Electrical Resistivity (25 °C/As is)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-55 ±10%
Lap-Shear Strength	N/A
Device Push-off Strength	500 psi ±20% >3.45 N/mm ²
Cured Density (gm/cc)	2.5 ±10%
Hardness (Type)	80 (A) ±10%
Thermal Conductivity	12 Btu-in/hr-ft ² -°F ±15% 1.7 W/m-°C ±15%
Linear Thermal Expansion Coeff. (ppm/°C)	80 ±15%
Tensile Modulus:	
Maximum Continuous Operation Temp. (°C)	<150

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REFLOW TEMPERATURES:

Temperature	Time	Pressure
190°C	1-5 sec	10 psi

SHELF LIFE:

Storage temperature	Shelf Life
25°C	1 yr