



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>

Tack Free
Ambient Temp Storable
Electrically Insulating
Thermoplastic
Film Adhesive

IDEAL FOR:

- Die Attach
- Component Attach

DESCRIPTION:

TP7855 is an alumina crystallites filled, electrically insulating, medium bond strength thermoplastic film adhesive. It is designed for bonding component and substrate. TP7855 has good thermal conductivity. The dry, tack free handling of this film makes it suitable for an automated assembly.

This high purity adhesive possesses excellent moisture resistance.

AVAILABILITY:

TP7855 is available in sheet sizes or as custom preforms. Standard thicknesses are 0.003" and 0.006". Special thicknesses are available. TP7858 can also be obtained in liquid form (LTP7858).

APPLICATION PROCEDURES:

- (1) Remove film from protective paper.
- (2) Cut to desired size.
- (3) Place on substrate and reflow according to the recommended schedule.

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
TP7855

TYPICAL PROPERTIES*

Electrical Resistivity (250 °C/1 minute)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-50 ±10%
Lap-Shear Strength	N/A
Device Push-off Strength	600 psi ±10%
	4.1 N/mm ² ±10%
Cured Density (gm/cc)	2.0 ±10%
Hardness (Type)	55 (D) ±10%
Thermal Conductivity	25 Btu-in/hr-ft ² -°F ±10%
	3.6 W/m-°C ±10%
Linear Thermal Expansion Coeff. (ppm/°C)	55 ±15%
Tensile Modulus:	
Maximum Continuous Operation Temp. (°C)	<250
* 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.	

REFLOW TEMPERATURES:

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
250°C	0.5-5 sec	5-10 psi

SHELF LIFE:

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