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**THERMOPLASTIC FILM
 TP7155**

**Thermally Conductive
 Thermoplastic
 Film Adhesive**

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. It is 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.

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)	2.5
Hardness (Type)	80 (A)
Thermal Conductivity	12 Btu-in/hr-ft ² -°F 1.7 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.

REFLOW TEMPERATURES:

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
190°C	1-5 sec	10 psi

SHELF LIFE:

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

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