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THERMOPLASTIC FILM
TP8550

Tack Free
Ambient Temp Storable
Electrically Conductive
Thermoplastic
Film Adhesive

IDEAL FOR:

- Die Attach
- Component Attach
- Substrate Attach

DESCRIPTION:

TP8550 is a silver filled thermoplastic film adhesive. It is designed for bonding component and substrate. Designed to meet the hybrid adhesive specification: MIL-STD883; Method 5011.4. TP8550 exhibits low outgassing at 125°C and is designed to pass NASA outgassing requirements. TP8550 has excellent thermal conductivity. The dry, tack-free handling of this film makes it suitable for an automated assembly.

Because of the relatively low rigidity of the adhesive, it is useful for large area die. This high purity adhesive possesses excellent moisture resistance.

AVAILABILITY:

TP8550 is available in sheet sizes or as custom preforms. Standard thicknesses are 0.003" and 0.006". Special thicknesses are available. TP8550 can also be obtained in liquid form (LTP8550).

APPLICATION PROCEDURES:

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

TYPICAL PROPERTIES*

Electrical Resistivity (200 °C/1 minute)	<4x10 ⁻⁴ ohm-cm
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp.(°C)	-70
Lap-Shear Strength	N/A
Device Push-off Strength	900 psi
Cured Density (gm/cc)	6.2 N/mm ² 3.5
Hardness (Type)	70 (A)
Thermal Conductivity	45 Btu-in/hr-ft ² -°F 6.4 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	65
Tensile Modulus:	
Maximum Continuous Operation Temp. (°C)	125

* 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>
160°C	0.5-5 sec	5-10 psi

SHELF LIFE:

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

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