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**TACK FILM**  
**RTK7558**

## Stress Free, Very High Thermal Conductivity Epoxy Film Adhesive

### IDEAL FOR:

- Large Area Die Attach
- Substrate and Component
- Reworkability
- Mismatched CTE's

### DESCRIPTION:

Room temperature storable tack-film RTK7558 is a reworkable, aluminum nitride filled, electrically insulating epoxy film adhesive. It is designed for bonding die, component and substrate to a mismatched substrate or carrier. This B-Staged, dielectric adhesive offers excellent reworkability at 80-150°C.

RTK7558 has very high thermal conductivity and the low Tg adhesive imposes minimum thermal stress on bonded parts during thermal cycling or shock testing.

### AVAILABILITY:

RTK7558 is available in sheet sizes or as custom preforms. Standard thicknesses are 0.003" and 0.006". Special thicknesses are available. This material is self-supporting without fiberglass reinforced.

### APPLICATION PROCEDURES:

- ( 1 ) Keep product at room temperature for 15 minutes before using.
- ( 2 ) Cut to desired size. Clean contact surfaces.
- ( 3 ) Remove one side of the release liner by peeling up a corner of the release liner. Fold the release liner over, approaching a 180° angle.  
 Pull the release liner quickly, removing it with one stroke. Apply to substrate, then remove other side of release liner and attach die or component.
- ( 4 ) Cure according to recommended schedule.

**CAUTION:** This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer to MSDS 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 A.I. Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

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### TYPICAL PROPERTIES\*

Electrical Resistivity ( 150 °C/ 30 minut )	>1x10 <sup>14</sup> ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-25
Lap-Shear Strength	1000 psi 6.9 N/mm <sup>2</sup>
Device Push-off Strength	2400 psi 16.6 N/mm <sup>2</sup>
Hardness (Type)	83 (A)
Cured Density (gm/cc)	2.3
Thermal Conductivity	25 Btu-in/hr-ft <sup>2</sup> -°F 3.6 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	110
Maximum Continuous Operation Temp. (°C)	150

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### CURE SCHEDULES:

Temperature	Time	Pressure
80°C	8 hr	3-5 psi
100°C	4 hr	3-5 psi
125°C	2 hr	3-5 psi
150°C	30 min	3-5 psi
200°C	10 min	3-5 psi

The die or component can also be tacked on the substrate at 80°C or higher, with 5 psi. When a fillet around the edge of the die or component is observed, the pressure can be released for the rest of the bonding cycle.

### SHELF LIFE:

Storage temperature	Shelf Life
0-5°C	1 yr in sealed package