



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>

Stress Free
High Thermal Conductivity
Tacky Epoxy Film Adhesive

IDEAL FOR:

- Substrate and Component
- Die Attach
- Heat Sink Attach

DESCRIPTION:

RTK7556 is a reworkable, boron nitride-filled, tacky epoxy film adhesive. It is designed for bonding component and substrate to a mismatched substrate or carrier. This B-staged conductive adhesive offers excellent reworkability at 80-150°C.

RTK7556 has high thermal conductivity and the low Tg adhesive imposes minimum thermal stress on bonded parts during thermal cycling or shock testing.

AVAILABILITY:

RTK7556 is available in reels, sheets, or as custom preforms. Standard thicknesses are 0.003" and 0.006". Special thicknesses are available. This material is a self-supporting, tacky epoxy film adhesive.

APPLICATION PROCEDURES:

- (1) Keep product at room temperature for at least minutes before using.
- (2) Cut to desired size.Clean contact surfaces if needed.
- (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 one of the recommended cure schedules.

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.

TACK FILM
RTK7556

TYPICAL PROPERTIES*

Electrical Resistivity (150 °C/ 60 min)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	750 ±10%
Glass Transition Temp.(°C)	-60 ±10%
Lap-Shear Strength	>500 psi >3.5 N/mm ²
Device Push-off Strength	>1000 psi >6.9 N/mm ²
Hardness (Type)	82 (A) ±10%
Cured Density (gm/cc)	1.2 ±10%
Thermal Conductivity	24 Btu-in/hr-ft ² -°F ±10% 3.4 W/m-°C ±10%
Linear Thermal Expansion Coeff. (ppm/°C)	110 ±15%
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.

CURE SCHEDULES:

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
100°C	4 hr	5-10 psi
125°C	2 hr	5-10 psi
150°C	1 hr	5-10 psi

The die or component can also be tacked on the substrate at 125°C or higher with 10 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:

<u>Storage temperature</u>	<u>Shelf Life</u>
0-5°C	1 yr in sealed package