YINCAE® INNOVATION AT ITS BEST

YINCAE Advanced Materials, LLC
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DA 150U Insulating Die Attach Adhesive Product Datasheet

High Thermal Stability
Excellent Moisture Resistance
High Reliability

Description

DA 150U is one-component, thermosetting insulating die attach adhesive which has been designed for thin, void free large chip (GaN) bonding. DA 150U has excellent adhesion, good thermal and UV resistance, as well as non-bleeding properties. It can be used for small and large die attach. It can be applied using a dispense method. It has demonstrated high reliability and high temperature reflow performance.

Typical Physical Properties

Product Name	DA 150U die attach adhesives
PROPERTIES OF UNCURED MATERIAL	
Chemistry	Epoxy
Specific Gravity (ASTM D 1475-60)	1.08 g/cc
Viscosity	500 – 2000 cp
PROPERTIES OF CURED MATERIAL	
Glass Transition Temperature (Tg) (ASTM D3418-82)	>100 °C
C.T. E (ASTM E 831), PPM /°C (ASTM E 831)	65
Lap shear strength (psi)	2800

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Thermal conductivity (W/mK)	> 0.4
Die Shear Strength (Kg/mm2)	2x2mm Silicon die on Pd: 2.0 2X2mm Au silicon die on bare Cu: 2.5 2x2mm Au silicon die on Au: 2.3
Extractable ions (MIL-STD-883E)	
Na+	<5ppm
K+	<5ppm
F-	<5ppm
Cl-	<10ppm

Recommended Curing Conditions

30 – 45 min cure at 150°C.
Note: the cure time not including the time to allow the bond location to reach the desired cure temperature. Alternate cure profiles may be evaluated.

Storage & Shelf Life

6 months provided materials are kept in a sealed original container at –40 °C. Storage beyond this period can produce higher viscosity. Protect from moisture, evaporation and foreign materials. Process ability of these products can be adversely affected by evaporation and contamination.

Safety

DA 150U is a friendly, non-toxic material. However, general hygiene practice is recommended when handling this material. For detailed information, please consult the product SDS.

Package

DA 150U insulating adhesives are available in 10cc and 30cc packages. Other packages are available depending upon customer's request. Contact YINCAE for order information.