

ABLEBOND® 84-1LMINB ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE

DESCRIPTION

ABLEBOND® 84-1LMINB adhesive is an improved version of ABLEBOND 84-1LMI silver-filled, high purity die attach adhesive.

Like ABLEBOND 84-1LMI adhesive, this solvent-free material exhibits very low levels of water extractable ionic impurities.

ABLEBOND 84-1LMINB adhesive is ideal for application by automatic dispenser, screening, or hand probe.

This material meets the requirements of MIL-STD-5011 and is only available with 5011 certification.

Typical Uncured Properties	ABLEBOND 84-1LMINB	Test Description	Test Method
Filler Type	Silver		
Viscosity @ 25°C	60,000 cP	Brookfield CP51 @ 5 rpm	ATM-0018
Work Life @ 25°C	3 days	Work life by consistency	ATM-0085
Storage Life	@ -10°C	6 months	ATM-0068
	@ -40°C	1 year	
Cure Process Data	ABLEBOND 84-1LMINB		
Recommended Cure Condition	30 minutes @ 150°C		
PHYSIOCHEMICAL PROPERTIES - Post Cure	ABLEBOND 84-1LMINB	Test Description	Test Method
Ionic Chloride	80 ppm	Teflon flask, 5 gm sample/20-40 mesh, 50 gm DI water, 100°C for 24 hours	ATM-0007
Sodium	25 ppm		
Potassium	5 ppm		
Water Extract Conductivity	15 µmhos/cm	Conductometer	ATM-0044
pH	4.4	pH meter	ATM-0002
Glass Transition Temperature	117°C	TMA expansion mode	ATM-0055

The figures shown above are typical values only. If you need to write a specification, please request our current Standard Release Specification.

84-1LMINB

Coefficient of Thermal Expansion	Below Tg	52 ppm/°C	TMA expansion mode	ATM-0055
	Above Tg	150 ppm/°C		
<i>THERMAL/ELECTRICAL PROPERTIES - Post Cure</i>	<i>ABLEBOND 84-1LMINB</i>	<i>Test Description</i>		<i>Test Method</i>
Thermal Conductivity @ 121°C	4.5 W/mK	C-MATIC conductance tester		ATM-0017
Volume Resistivity	0.00009 ohm-cm	4-point probe		ATM-0020
<i>MECHANICAL PROPERTIES - Post Cure</i>	<i>ABLEBOND 84-1LMINB</i>	<i>Test Description</i>		<i>Test Method</i>
Die Shear Strength @ 25°C	10 kg _f /die	2 x 2mm (80 x 80 mil) Au to Au		ATM-0052

INSTRUCTIONS

Apply adhesive as required. Assemble bonds. Cure at the recommended cure schedule(s).

AVAILABILITY

This adhesive is available in a variety of package sizes, ranging from 1cc to 1 pound.

STORAGE

ABLEBOND 84-1LMINB adhesive may be stored up to 6 months at -10°C or 1 year at -40°C.

Caution: This product may cause skin irritation in sensitive persons. Avoid skin contact. If contact does occur, wash area immediately with soap and water. Please refer to the Material Safety Data Sheet (OSHA) for more details.

Ablestik™

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