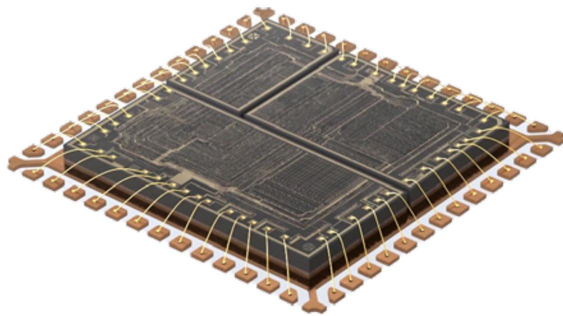
LOCTITE®

ENABLING ***SMALLER, FASTER***

MORE FUNCTIONAL DEVICES

LOCTITE® *ABLESTIK* ATB 125GR delivers excellent performance for demanding semiconductor applications



LOCTITE® *ABLESTIK* ATB 125GR
Non-conductive die attach film for lead-frame & laminate.

Henkel's LOCTITE® *ABLESTIK* ATB 125GR is a non-conductive die attach film for high density, high-reliability semiconductor packages, enabling miniaturization, thinner dies, and tighter die to pad ratios. This adhesive meets automotive Grade 0 reliability standards, provides broad application flexibility, and delivers excellent performance for demanding semiconductor applications.

Key Applications:

- Widely used in wirebond packages for consumer, automotive and industrial applications
- Compatible with Cu, Ag and PPF metal leadframes and laminate substrates
- Suitable for die sizes from 0.5 mm x 0.5 mm to 3.0 mm x 3.0 mm
- High density packages: MCM, MCP, SiP, Hybrid PoP

Henkel Adhesive Technologies

LOCTITE®

Technical Information

Application Method	Die Attach Film
Color	White Yellow
Adhesive Thickness	25 µm, customizable
Wafer Size	8, 12 inch.
Glass Transition Temperature, T_g (°C)	T_g1: 82
	T_g2: 306
Coefficient of Thermal Expansion (ppm/°C)	Below T_g: 82
	Above T_g: 140
Tensile Modulus, DMA (N/mm^2)	-65°C: 5,385
	25°C: 3,205
	150°C: 281
	200°C: 177
Mositure Absorption (WT%)	1.53
Die Shear Strength, BT substrate at 260°C (kg-f/die)	4.9
Optimal Storage	5°C

LOCTITE® *ABLESTIK* ATB 125GR, with excellent workability and a wide process window, has exceptionally strong bonds after cure.

Figure 1: Dicing - No Burr, no pick and place errors

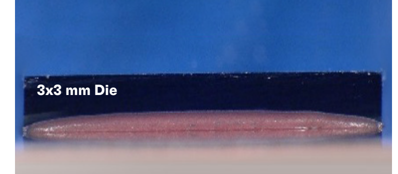


Figure 2: Fillet Height (30%), strong bond after cure

Key Benefits:

- High reliability for small to medium size die (0.5 mm x 0.5 mm to 3.0 mm x 3.0 mm)
- Robust reliability performance in varied packages to simplify BOM management
- Reduce material waste

Key Features:

- MSL1 on Cu Leadframe
- MSL2 on Ag or PPF Leadframe
- Low Ionics for robust performance in packages with Cu bonding wires
- Low modulus at room temperature and low CTE
- High modulus at wire bonding temperature
- BPA-free after cure
- Excellent workability and a wide process window

Want to find out more about next-generation ncDAF technology designed for high reliability?

Get in touch with our technology specialists to learn about our portfolio of advanced die attach film materials.

henkel-adhesives.com/electronics

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Scan the QR code above to access the Technical Data Sheet.

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