Die Attach Pastes

DIE ATTACH PASTES (DAP) FOR WIREBOND LAMINATE PACKAGING

- BGA, PBGA, FBGA and CBGA
  - Electrically Conductive
    - LOCTITE ABLESTIK 2000
  - Electrically Non-conductive
    - LOCTITE ABLESTIK 2025D
    - LOCTITE ABLESTIK 2100A
    - LOCTITE ABLESTIK 2300
    - LOCTITE ABLESTIK 2700HT

- LGA
  - Electrically Conductive
    - LOCTITE ABLESTIK QM536NB
  - Electrically Non-conductive
    - LOCTITE ABLESTIK 2300
    - LOCTITE ABLESTIK QM536NB

- SmartCard (COB)
  - Electrically Conductive
    - LOCTITE ABLESTIK 2030SCR
  - Electrically Non-conductive
    - LOCTITE ABLESTIK ABP 2035SCR
    - LOCTITE ABLESTIK ABP 2032E
    - LOCTITE ABLESTIK ABP 2501

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## ELECTRICALLY CONDUCTIVE DIE ATTACH PASTES (DAP)

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<th>PRODUCT</th>
<th>DESCRIPTION</th>
<th>KEY ATTRIBUTES</th>
<th>DIE SIZE (mm)</th>
<th>SUBSTRATE FINISH</th>
<th>MOISTURE SENSITIVITY LEVEL, MSL</th>
<th>VOLUME RESISTIVITY (Ohm-cm)</th>
<th>THERMAL CONDUCTIVITY (W/m-K)</th>
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| **LOCTITE ABLESTIK 2000** | Ag-filled die attach adhesive | • Low bleed  
• Very low stress  
• Ultra-low moisture absorption  
• Fast oven cure with no voids  
| ≤ 12 x 12        | Solder mask or Au            | L3 260°C capable                              | 5.0 x 10⁻⁴     | 1.2              | 30 min. ramp and 15 min. hold at 175°C |
| **LOCTITE ABLESTIK 2100A** | Ag-filled die attach adhesive | • Low bleed  
• Low stress  
• Oven cure  
| ≤ 12 x 12        | Solder mask or Au            | L2 260°C capable                              | 5.0 x 10⁻³     | 1.2              | 30 min. ramp and 15 min. hold at 175°C |
| **LOCTITE ABLESTIK 2300** | Ag-filled die attach adhesive | • Low bleed  
• Low stress  
• Excellent dispensability  
• Oven cure  
| ≤ 8 x 8          | Solder mask or Au            | L2 260°C capable                              | 5.0 x 10⁻³     | 0.6             | 30 min. ramp and 15 min. hold at 175°C |
| **LOCTITE ABLESTIK 2700HT** | Ag-filled die attach adhesive | • Excellent bleed performance  
• Long work life  
• Strong hot/wet adhesion to Au  
• Ideal for small needle dispensing  
• Oven cure  
| ≤ 3 x 3          | Solder mask, Ag or Au        | L3 260°C capable                              | 3.0 x 10⁻⁴     | 11.0            | 30 min. ramp and 30 min. hold at 175°C in nitrogen |
| **LOCTITE ABLESTIK ABP 2030SCR** | Ag-filled die attach adhesive | • Low stress  
• Compatible with dam & fill encapsulants  
• Excellent dispensing performance for high throughput application  
• Snap cure  
| ≤ 10 x 10        | Solder mask, Ag, Au or plastics | L3 260°C capable                              | 2.0 x 10⁻⁴     | 2.0             | 120 sec. at 120°C               |
| **LOCTITE ABLESTIK ABP 2032S** | Ag-filled, epoxy die attach adhesive | • Good adhesion to a variety of substrates  
• Good dispensing characteristics  
• Low temperature oven cure  
| ≤ 10 x 10        | Solder mask, Ag, Au or steel or plastics | L3 260°C capable                              | 2.0 x 10⁻⁴     | 1.0             | 60 min. at 80°C                |

## ELECTRICALLY NON-CONDUCTIVE DIE ATTACH PASTES (DAP)

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<th>KEY ATTRIBUTES</th>
<th>DIE SIZE (mm)</th>
<th>SUBSTRATE FINISH</th>
<th>MOISTURE SENSITIVITY LEVEL, MSL</th>
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| **LOCTITE ABLESTIK 2025D** | Silica-filled die attach adhesive | • Low bleed  
• Very low stress  
• Red color for vision recognition  
• Good adhesion to a variety of substrates  
• Oven cure  
| ≤ 8 x 8          | Solder mask, Cu, Ag or Au    | L3 260°C capable                              | 407          | 0.4              | 30 min. ramp and 15 min. hold at 175°C |
| **LOCTITE ABLESTIK 2033SC** | Silica-filled die attach adhesive | • Long work life  
• Low bleed  
• Optimized rheology  
• Snap cure  
| ≤ 8 x 8          | Solder mask, Ni, Cu, Ag or Au | L3 260°C capable                              | 2,100       | 0.35             | 90 sec. at 110°C               |
| **LOCTITE ABLESTIK ABP 2033S** | Silica-filled die attach adhesive | • Low stress  
• Compatible with dam & fill encapsulants  
• Excellent dispensing performance for high throughput application  
• Snap cure or low temperature oven cure  
| ≤ 5 x 5          | Solder mask or Au            | L3 260°C capable                              | 1,500       | 1.0              | 2 min. at 120°C (snap)          |
| **LOCTITE ABLESTIK ABP 2033S** | Silica-filled, BMI hybrid die attach adhesive | • Excellent dispensing performance for high throughput application  
• Good adhesion performance for a wide die size range  
• Low stress  
• Snap cure  
| ≤ 5 x 5          | Solder mask, Ag or Au        | L3 260°C capable                              | 1,430       | 0.4              | 90 sec. at 110°C               |
| **LOCTITE ABLESTIK ABP 2501** | PTFE-filled, BMI die attach adhesive | • Low bleed  
• Very low stress  
• White color for vision recognition  
• Widely used for stacked die  
• Fast oven cure  
| ≤ 8 x 8          | Solder mask or Au            | L1 260°C capable                              | 300         | 0.3              | 30 min. at 150°C               |