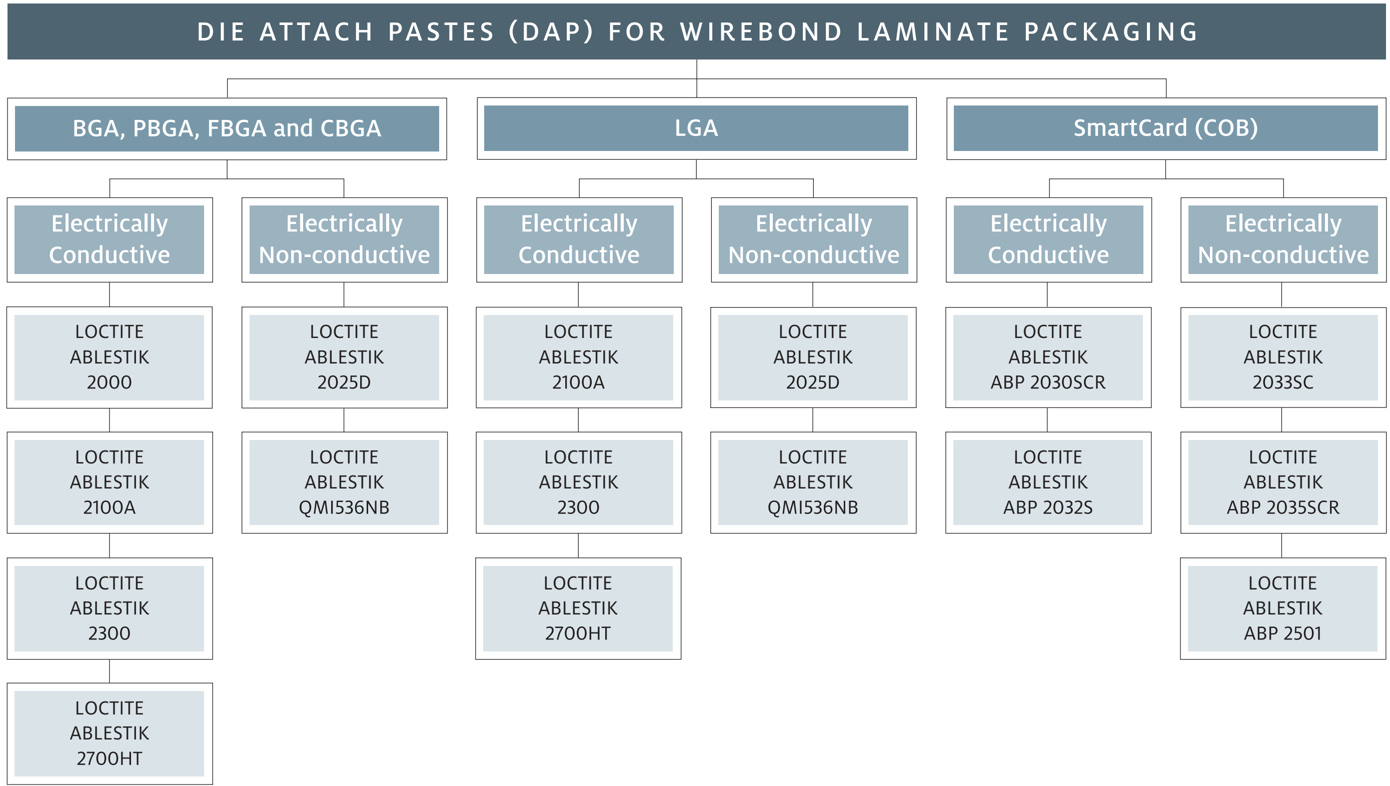
LOCTITE®

# Die Attach Pastes

## DIE ATTACH PASTES (DAP) FOR WIREBOND LAMINATE PACKAGING





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## ELECTRICALLY CONDUCTIVE DIE ATTACH PASTES (DAP)

| PRODUCT | DESCRIPTION | KEY ATTRIBUTES | DIE SIZE (mm) | SUBSTRATE FINISH | MOISTURE SENSITIVITY LEVEL, MSL | VOLUME RESISTIVITY (Ohm·cm) | THERMAL CONDUCTIVITY (W/m·K) | RECOMMENDED CURE |
|---|---|---|---|---|---|---|---|---|
| LOCTITE ABLESTIK 2000 | Ag-filled die attach adhesive | • Low bleed<br>• Low stress<br>• Ultra-low moisture absorption<br>• Fast oven cure with no voids | ≤ 12 x 12 | Solder mask or Au | L2 260°C capable | $5.0 \times 10^{-4}$ | 1.2 | 30 min. ramp and 15 min. hold at 175°C |
| LOCTITE ABLESTIK 2100A | Ag-filled die attach adhesive | • Low bleed<br>• Low stress<br>• Oven cure | ≤ 12 x 12 | Solder mask or Au | L2 260°C capable | $5.0 \times 10^{-2}$ | 1.2 | 30 min. ramp and 15 min. hold at 175°C |
| LOCTITE ABLESTIK 2300 | Ag-filled die attach adhesive | • Low bleed<br>• Low stress<br>• Excellent dispensability<br>• Low voiding<br>• Oven cure | ≤ 8 x 8 | Solder mask or Au | L2 260°C capable | $5.0 \times 10^{-2}$ | 0.6 | 30 min. ramp and 15 min. hold at 175°C |
| LOCTITE ABLESTIK 2700HT | Ag-filled die attach adhesive | • Excellent bleed performance<br>• Long work life<br>• Strong hot/wet adhesion to Au<br>• Ideal for small needle dispensing<br>• Oven cure | ≤ 3 x 3 | Solder mask, Ag or Au | L3 260°C capable | $3.0 \times 10^{-5}$ | 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<br>• Compatible with dam & fill encapsulants<br>• Excellent dispensing performance for high throughput application<br>• Snap cure | ≤ 10 x 10 | Solder mask, Ag, Au or plastics | L3 260°C capable | $2.0 \times 10^{-4}$ | 2.0 | 120 sec. at 120°C |
| LOCTITE ABLESTIK ABP 2032S | Ag-filled, epoxy die attach adhesive | • Good adhesion to a variety of substrates<br>• Good dispensing characteristics<br>• Low temperature oven cure | ≤ 10 x 10 | Solder mask, Ag, Au, steel or plastics | L3 260°C capable | $2.0 \times 10^{-4}$ | 1.0 | 60 min. at 80°C |

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

| PRODUCT | DESCRIPTION | KEY ATTRIBUTES | DIE SIZE (mm) | SUBSTRATE FINISH | MOISTURE SENSITIVITY LEVEL, MSL | MODULUS AT 25°C (MPa) | THERMAL CONDUCTIVITY (W/m·K) | RECOMMENDED CURE |
|---|---|---|---|---|---|---|---|---|
| LOCTITE ABLESTIK 2025D | Silica-filled die attach adhesive | • Low bleed<br>• Very low stress<br>• Red color for vision recognition<br>• Good adhesion to a variety of substrates<br>• 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<br>• Low bleed<br>• Optimized rheology<br>• 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 2035SCR | Silica-filled die attach adhesive | • Low stress<br>• Compatible with dam & fill encapsulants<br>• Excellent dispensing performance for high throughput application<br>• 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 2501 | Silica-filled, BMI hybrid die attach adhesive | • Excellent dispensing performance for high throughput application<br>• Good adhesion performance for a wide die size range<br>• Low stress<br>• 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 QMI536NB | PTFE-filled, BMI die attach adhesive | • Low bleed<br>• Very low stress<br>• White color for vision recognition<br>• Widely used for stacked die<br>• Fast oven cure | ≤ 8 x 8 | Solder mask or Au | L1 260°C capable | 300 | 0.3 | 30 min. at 150°C |

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