

Technical Data Sheet

Conductive Silver Adhesive EA182MS

Product description

EA182MS is a general purpose, silver-filled epoxy adhesive, designed for microelectronic applications. It has a single component composition, and contains glass microspheres to ensure a minimum bond line thickness of approximately 50 microns.

EA182MS is formulated and processed to be RoHS compliant.

Cured Film Properties

Film Thickness: $60 \pm 5 \mu\text{m}$

Volume Resistivity: $\leq 0.4 \text{ m}\Omega\cdot\text{cm}$

Formulation Properties

Viscosity: Using a 25mm diameter, 1° cone and plate geometry, at 25 °C:

60.0 – 98.0 Pa.s at a shear rate of 3.84 s^{-1}

28.8 – 49.5 Pa.s at a shear rate of 38.4 s^{-1}

Specific Gravity: $2.80 - 3.20 \text{ g/cm}^3$

Shelf Life: 4 months from date of shipment when stored at 5 °C. Allow unopened jars to stabilize to room temperature after removal from the refrigerator to prevent condensation.

Processing Recommendations

Printing: Stencil print using a stainless steel foil is the recommended deposition method. A 75 microns thick foil will yield a cured film thickness of approximately $60 \pm 5 \mu\text{m}$.

Curing: 100 °C for 60 minutes followed by 150 °C for 120 minutes in an oven with forced air flow or an equivalent conveyor drier.

Cleaning: BCA (butyl carbitol acetate) followed by IPA (iso propyl alcohol). Do not use acids, alkalis or chlorinated solvents as they may cause polymerization.



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