

Technical Data Sheet

Low Temperature Co-Fired Ceramic Systems 3309 Solderable Ag Conductor

Application

3309 is a mixed bonded, silver conductor paste used for post firing on FERRO A6M and L8 LTCC multilayer structures and combines excellent resistivity with good solderability and adhesion strength.

3309 displays excellent compatibility with fired L8 and A6M ceramic and their Ag-based metallization systems.

3309 Ag paste is formulated and processed to be RoHS compliant.

Typical Formulation Properties

- Viscosity¹: 110 Pa.s
- Metal Content: 79 %
- Line Resolution: 5 mil lines and spaces

Storage and Shelf-life: This product should be stored in a tightly sealed container at 10-25°C, in a dry place away from direct sunlight. Shelf life of a factory sealed container is minimum 6 months from date of shipment when properly stored.

Typical Process Parameters

Thinning: This paste is formulated at the appropriate viscosity for the intended application. Contact Technical Service for a recommended thinner to replace solvent loss.

Printing: 3309 is printed using a 325 mesh stainless steel screen with a 12 µm emulsion.

Leveling: The paste should be allowed to level for 3-4 minutes at room temperature.

Drying: 10-15 minutes at 100-120 °C with forced air flow and exhaust.

Firing: 850°C for 10 minutes at peak temperature with an overall profile of 30 to 60 minutes.

Typical Fired Properties

- Fired Thickness: 10-12 µm
- Resistivity²: ≤ 1.3 mΩ/Sq
- Solderability³: > 90% wetting
- Leach Resistance³: ≤ 20% loss
- Initial Adhesion⁴: ≥ 5 lbs.
- Aged Adhesion⁵: ≥ 5 lbs.

¹Brookfield Model HBT 2X or DVIII, cone & plate viscometer

²Normalized to 1 mil (25.4µm) fired thickness

³62SN-36Pb-2Ag Solder @230°C, RMA flux

⁴ Peel on 2mm x 2mm pad

⁵48 hrs. @ 150 °C



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