

Technical Data Sheet

Low Temperature Co-fired Ceramic Systems 4007 Brazeable Au Conductor

Application

4007 Brazeable Au Conductor is a frit-less paste designed to provide Au-rich barrier layer on Ferro A6M-E and L8 LTCC tape to braze pins, leads, seal rings and heat sinks using Au/Sn braze paste or pre-forms.

Au-plated Kovar, Invar, and Alloy 42 metal components are recommended based on their close TCE match to A6M-E and L8.

C4007 Au paste is formulated and processed to be RoHS compliant.

Typical Formulation Properties

- Viscosity¹: 110 Pa.s
- Metal Content: 87 %
- 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: 4007 is printed over a 6-9 µm pre-fired layer of FX30-025JH Au conductor using a 200 mesh stainless steel screen with a 15 µm emulsion.

Up to three print/dry cycles may be needed to achieve recommended 20-25 µm dried thickness.

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 45 minutes.

Typical Fired Properties

- Fired Thickness: 10-12 µm
- Resistivity²: < 2.1 mΩ/Sq

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

²Normalized to 1 mil (25.4µm) fired thickness



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