CP-800S, CP-1000S

~Copper paste for through-hole~

Highly-reliable copper paste for through-hole, available for automotive boards.

**Features**

- Compared to copper plating or silver paste, copper paste can reduce production cost.
- Available for small diameter through-hole and four-layer boards.
- Meets all the industrial standards of reliability evaluations required by electrical assembly field. Excellent electromigration resistance and available for wide range of board types, from consumer to automobile.

**Printing and Curing process**

- Compared to plating, copper paste printing process is simpler and produces less waste.
- Available for substrates of various thickness and hole size.

**Application examples for small diameter through-hole and four-layer boards**

- CP-800S used in various fields maintains high reliability even in the case of small diameter and four-layer boards.
- We offer CP-1000S (developed product) applicable for Φ0.25mm diameter through-hole with 1.6mm substrate thickness.

**Small diameter through-hole**

- Electric resistance value change of the cured copper paste
- Recommended curing profile

**Four-layer board**

- Specification example of four-layer board
- Cross-section of four-layer board
- CP-800S
  - Hole diameter (mm): 0.3
  - Substrate thickness (mm): 1.0
  - Copper foil thickness (μm):
    - L1: 35
    - L2: 35
    - L3: 35
    - L4: 35
  - Prepreg material thickness (mm): 0.13
  - Core material thickness (mm): 0.7

**Cross-section of through-hole**

- CP-1000S
  - Hole diameter (mm): 0.4
  - Substrate thickness (mm): 1.6
  - Copper foil thickness (μm):
    - L1: 35
    - L2: 35
    - L3: 35
    - L4: 35
  - Prepreg material thickness (mm):
    - L1: 0.7
    - L4: 0.13

**Printing process (Screen printing)**

- Drilling
- Printing

**Curing process**

- Resin curing
- Air curing
- N2 curing

**Evaluation board**

- CEM-3
- FR-4

**Cross-section of four-layer board**

- CP-800S
  - Resistance: 15mΩ / through-hole
  - Not guaranteed value