

## Conductors

### C8717B



### Thick Print Silver Conductor

**Description:**

C8717B is a lead, nickel and cadmium free Ag conductor that yields a smooth, dense film on alumina and BeO. This material is recommended for power hybrid applications where high current is a requirement and for large ground plane areas. C8717B provides excellent solderability, void free soldering and good solder leach resistance.

● **Key Benefits:**

- Lead, nickel and cadmium free
- Excellent fired film density
- Low resistivity
- High adhesion
- Excellent solderability

● **Typical Properties:**

**Resistivity:**

< 2.0 milliohms per square  
at 25 microns fired film thickness.

**Adhesion:**

2x2 mm pad

Initial: ≥5.0 lbs  
Aged: ≥5.0 lbs (48 hrs. @ 150°C)

**Solderability:**

5 second dip @ 230°C  
62Sn/36Pb/2Ag, RMA Flux  
≥ 95%

**Solder Leaching:**

|                      | <u>#of Dips</u> | <u>% Line Lost</u> |
|----------------------|-----------------|--------------------|
| 10sec dips RMA flux  | 1               | ≤ 10%              |
| 62Sn/36Pb/2Ag, 230°C | 3               | ≤ 15%              |

**Viscosity**

140-200 Kcps Brookfield HBT  
SC4-14 spindle and 6R utility cup  
@ 10 rpm, 25°C,

**Solids:**

90% ± 1%

● **Recommended Processing Guidelines:**

**Printing:**

280 mesh stainless steel screen.  
0.5 mil emulsion

**Coverage:**

70 cm<sup>2</sup>/g at 12 micron fired film thickness.

**Drying:**

Leave at room temp. for 5-10 minutes.  
Dry at 150°C for 10 minutes.

**Firing:**

850°C peak temperature  
Dwell time of 10-12 minutes.  
Total cycle time 36-60 minutes.

**Thickness:**

Dried: 30 - 36 microns  
Fired: 18 - 25 microns

**Thinner:**

RV-372 (Terpineol)

**Warranty:**

Material guaranteed to meet specifications  
for 6 months from date of shipment.

**Storage:**

Store in a dry location at 5°C-25°C.  
**DO NOT REFRIGERATE.**  
Allow paste to come to room temperature  
prior to opening.  
Spatulate well before using.

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The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application.

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