

Conductors

C5799

Gold Via Fill

Description:

C5799 is a screen printable gold via fill conductor designed for use in multilayer hybrids. It is designed to be used with either IP9117 or IP9118. It gives excellent surface coplanarity along with good electrical conductivity.

● **Key Benefits:**

- Outstanding via fill to dielectric adhesion
- Excellent surface coplanarity
- Good conductivity
- Easy to process
- Ideal interface for Au bearing conductors

● **Typical Properties:**

Resistivity:

≤ 15.0 milliohms per square
at 25 microns fired film thickness

Coverage:

68 cm²/g

Viscosity:

250-400 Kcps Brookfield HBT SC4-14 spindle
and 6R utility cup @ 10 rpm, 25°C

Solids:

86.0 ± 1%

● **Recommended Processing Guidelines:**

Processing Sequence:

- Print/Dry/Fire Bottom Conductor
- Print/Dry/Fire 1st Dielectric
- Print/Dry/Fire 2nd Dielectric
- Print/Dry/Fire C5799
- Print/Dry/Fire 3rd Dielectric
- Option A:
Print/Dry/Fire conductor as via fill
Print/Dry/Fire next conductor layer
- Option B:
Print/Dry/Fire next conductor layer
- Option C:
Print/Dry/Fire C5799
Print/Dry/Fire Conductor layer

Printing:

325 mesh Stainless steel screen
0.8 mil emulsion

Thickness:

Fired: 20-26 microns

Drying:

Dry at 150°C for 10 minutes.

Firing:

875°C peak
Dwell time of 8-12 minutes.

Compatibility:

Conductors: C5789, C5790
Dielectric: IP9118, IP9117W, IP9117

Thinner:

Heraeus 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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