

Conductors

C4082



Silver/Palladium/Platinum Conductor

Description:

C4082 is a Pb and Cd free Ag/Pd/Pt formulation which provides outstanding leach resistance and aged adhesion with many types of solder. This material has excellent silver migration resistance. C4082 prints and holds 5 mil lines and spaces.

● **Key Benefits:**

- Lead and Cadmium free
- Excellent Ag migration resistance
- High coverage
- Outstanding leach resistance

● **Typical Properties:**

Resistivity:

≤ 100 milliohms per square
at 12 microns fired film thickness

Adhesion:

80 x 80 mil pad
SAC305 @ 255°C

Initial	≥ 5.0 lbs
72 hrs @ 150°C	≥ 4.0 lbs
500 hrs @ 150°C	≥ 4.0 lbs

Solderability:

80 x 80 mil pad
SAC305, 5 second dip
@ 255°C, RMA flux
≥ 90% solder coverage

Solder Leaching:

SAC305
@ 255°C, RMA flux, 5 second dips

# Dips	% Line Lost
4	<5%
5	<10%

Viscosity:

150-250 Kcps, Brookfield HBT,
spindle #6 @ 10 rpm, 25 °C

Solids:

79 ±1%

● **Recommended Processing Guidelines:**

Printing:

280 stainless steel mesh
0.5 mil emulsion

Drying:

Dry at 150°C for 10 minutes

Firing:

850°C peak temperature
Dwell time of 9-11 minutes

Line Resolution:

5 mils (125 microns)

Thickness:

Wet:	30-35 microns
Dried:	18-21 microns
Fired:	10-15 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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