

Component Metallizations

LP11-4493

Platinum Conductor

Description:

LP11-4493 is a fritted platinum paste, which fires to pure metal surface. This material is particularly suited for poorly controlled firing atmospheres and profiles.

● **Key Benefits:**

- Chemically resistant
- Cadmium free
- Can be used on alumina, zirconia or titania bodies

● **Typical Properties:**

Resistivity:

≤ 50 milliohms per square
at 10 microns fired film thickness

HTCR/CTCR (ppm/°C):

< 3400/<3600

Adhesion:

80 x 80 mil pad on alumina @ 950°C
62Sn/36Pb/2Ag @ 235°C, RMA flux
Initial: >1.5 lbs.
100 Hrs. @ 150°C > 2.0 lbs.

10Sn/88Pb/2Ag @ 365°C, RMA flux
Initial: > 4 lbs.
100 Hrs. @ 150°C > 4.0 lbs.

Solderability:

62Sn/36Pb/2Ag @ 235°C and 10Sn/88Pb/2Ag @ 365°C,
5 sec. dip, RMA flux, 80 x 80 mil pad
> 85%

Solder Leaching:

62Sn/36Pb/2Ag @ 235°C and 10Sn/88Pb/2Ag @ 365°C,
RMA flux, 80 x 80 mil pad
< 20% loss after 6 x 10 sec. dips

Viscosity:

5.5 –10.3 Kcps, Haake Rotovisco PKII,
1° @ 300sec⁻¹, 25°C

Solids:

85 –85.5%

● **Recommended Processing Guidelines:**

Printing:

280 – 325 mesh
0.5 mil emulsion

Drying:

90 - 150°C peak temperature
Cycle time of 10 minutes

Firing:

840-950°C peak temperature
Dwell time of 9-11 minutes

Thickness:

Dried: 18-20 microns
Fired: 9-11 microns

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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