

Technical Data Sheet

THICK FILM MATERIALS

Product Type: Component Metallization

Product Name: PCC11913



Lead Free Silver Conductor

Description

PCC11913 is a Pb and Cd free low temperature firing silver paste designed to screen print solderable electrodes onto a variety of electrical ceramic component devices. The fired film forms a highly adherent bond to many types of substrates, including piezoelectric transducers (PZTs), NTC thermistors, alumina, steatite, and porcelain. The metalized electrode is readily solderable for external lead attachment.

Key Benefits

- REACH¹ and ROHS² compliant
- Pb and Cd free
- Lower firing temperature (< 700 °C)

Typical Properties

Resistivity

≤ 4 mΩ/□
at 25 μm fired film thickness

Adhesion

Sn62/Pb36/Ag2 at 200 °C
100 mil x 100 mil pads
Initial > 6.0 lbs

Viscosity

80 – 100 Kcps, Brookfield HBT
SC4-14 and 6R utility cup at 10 rpm, 25 °C

Recommended Processing Guidelines

Printing

80 – 200 stainless steel mesh screens
0.7 – 1.0 mil emulsion
Allow parts to level at room temperature before drying.

Drying

150 °C for 10 – 15 minutes

Firing

Optimum firing parameters depend on substrate composition
650 – 700 °C peak firing temperature
Dwell time of 8 – 12 minutes
Total cycle time of 45 – 60 minutes
Larger parts may require a longer firing profile

Thickness

Fired 9 – 15 μm

Thinner

RV-100

Warranty

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

Storage

Store in a dry location at 5 – 25 °C.

DO NOT REFRIGERATE.

Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.

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Legend:

1) REACH compliant according to the latest ** Annex XIV to Regulation (EC) of the European Parliament and of the council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.

2) RoHS compliant according to the latest ** Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb).

* See the data sheet issue date (DD/MM/YY) as reference of validity of latest edition which is available on request

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