

## Technical Data Sheet

### THICK FILM MATERIALS

**Product Type:** Component Metallization

**Product Name:** PCC11914



Pb and Cd Free Silver Conductor

#### Description

PCC11914 is a Pb and Cd free high performance silver conductor designed for metallizing ceramic component devices. It employs a mix bonded; lead free frit system that yields a dense, highly conductive film that provides high adhesion to various oxide substrates. The rheology of PCC11914 is optimized for dipping and spraying methods of application.

#### Key Benefits

- REACH<sup>1</sup> and ROHS<sup>2</sup> compliant
- Pb and Cd free
- Excellent conductivity
- High adhesion to various oxide substrates
- Optimised for dipping and spraying applications

#### Typical Properties

##### Resistivity

< 1.5 mΩ/□  
at 25 μm fired film thickness

##### Viscosity

2.7 – 3.3 Kcps, Brookfield RVT  
Spindle #4 at 20 rpm, 25 °C

##### Solderability

3 seconds dip  
Sn62/Pb36/Ag2 at 200 °C  
100 % coverage

##### Solder Leaching

Sn62/Pb36/Ag2 at 230 °C  
100 mil wide conductor trace, 5 x 5 seconds dips  
≤ 10 % loss

##### Adhesion

Sn62/Pb36/Ag2 at 230 °C  
80 mil x 80 mil pad  
Initial > 6.0 lbs

#### Recommended Processing Guidelines

##### Application

The material should be thoroughly shaken before use. Apply the materials by dipping or spraying.

##### Drying

125 – 150 °C for 10 – 15 minutes

##### Firing

850 °C peak temperature  
Dwell time of 10 minutes

##### Thickness

Fired 11 – 18 μm

##### Thinner

RV-4424

##### 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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