

Technical Data Sheet

THICK FILM MATERIALS

Product Type: Conductors

Product Name: C8728



Pb and Cd Free Silver Conductor

Description

C8728 is a Pb, Cd and Ni free Ag conductor that yields a smooth, dense film on alumina. This material is recommended for general purposes and for large ground plane areas. C8728 provides excellent solderability, void free soldering and good solder leach resistance.

Key Benefits

- Excellent fired film density
- High aged adhesion
- Excellent solderability with Sn62 and Sn95/Ag5
- Pb, Cd and Ni free
- REACH¹ and ROHS² compliant

Typical Properties

Resistivity

< 3.0 mΩ/□ at 12 μm fired film thickness

Adhesion

2 x 2 mm pad

Sn62/Pb36/Ag2 at 230 °C, RMA flux

Initial: ≥ 5.0 lbs

48 hours at 150 °C: ≥ 4.0 lbs

1000 hours at 150 °C: ≥ 4.0 lbs

Solderability

5 second dip, RMA flux,

Sn62/Pb36/Ag2, 230°C, ≥ 95 %

Sn95Ag5, 260°C, ≥ 95 %

Solder Leaching

10 sec dips, RMA flux

	# of Dips	% Line Lost
Sn62/Pb36/Ag2, 230°C,	1	≤ 10 %
Sn95/Ag5, 260°C,	1	≤ 10 %

Coverage

80 cm²/g at 12 μm fired film thickness

Viscosity

90 – 150 Kcps Brookfield HBT

SC4 – 14 spindle, 6R utility cup at 10 rpm, 25 °C

Solids

80.0 ± 1.5 %

Recommended Processing Guidelines

Printing

280 mesh stainless steel screen

0.5 mil emulsion

Drying

Allow to level at room temperature for 5 – 10 minutes

150 °C for 10 minutes

Firing

850 °C peak temperature

Dwell time of 10 – 12 minutes,

Total cycle time 36 – 60 minutes

Film Thickness:

Wet: 33 – 37 μm

Dried: 23 – 27 μm

Fired: 10 – 15 μm

Thinner:

RV-372

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)

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