

Technical Data Sheet



THICK FILM MATERIALS

Product Type: Conductors

Product Name: C2129A



Pb and Cd Free Silver/Palladium Conductor

Description

C2129A is a high performance Pb, Cd and Ni free mixed bonded Ag/Pd conductor material. It offers cost savings over standard Ag/Pd formulations while maintaining the advantages of leach resistance and aged adhesion. C2129A is also aluminum wire bondable.

C2129A is supplied with a rheology, which results in a dense, uniform fired film.

Key Benefits

- Low cost
- Excellent solderability and leach resistance
- Low resistivity
- Pb, Cd and Ni free
- Good Al wire bond adhesion (initial and aged)

Recommended Processing Guidelines

Printing

280 – 325 mesh stainless steel screen
0.5 mil emulsion
1.1 mil wire

Coverage

85 cm²/g at 12 µm fired film thickness

Drying

150 °C for 10 minutes

Firing

850 °C peak temperature
Dwell time at peak temperature for 10 minutes

Film Thickness:

Wet:	30 – 36 µm
Dried:	22 – 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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Typical Properties

Resistivity

≤ 6.0 mΩ/□ at 12 μm fired film thickness

Viscosity

120 – 180 Kcps Brookfield HBT

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

% Solids

80.0 ± 1.0 %

Solderability

Sn62/Pb36/Ag2 at 230 °C, RMA flux

5 second dip ≥ 95 %

Solder Leaching

Sn62/Pb36/Ag2 at 230 °C, RMA flux

10 second dip up to 3 x 10 sec dip

Adhesion

Sn62/Pb36/Ag2 at 230 °C, RMA flux

80 x 80 mil pads

Initial: ≥ 5.0 lbs

48 hours @ 150 °C: ≥ 3.0 lbs (1 x 850 °C)

≥ 4.0 lbs (5 x 850 °C)

1000 hours @ 150 °C: ≥ 3.0 lbs (1 x 850 °C)

≥ 4.0 lbs (5 x 850 °C)

Wire Bond Adhesion

10 mil Al wire, 99.999 % Al, Elongation > 5 %

5 x 850 °C firing

Initial: ≥ 400.0 g

1000 hours @ 150 °C: ≥ 400.0 g

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