

## Technical Data Sheet



**Product Type:** Conductors

**Product Name:** C8729



### Plateable Silver Conductor

#### Description

C8729 is a Pb, Cd and Ni free plateable silver conductor that yields a smooth, dense film. It exhibits high adhesion on alumina substrates. C8729 can be multiple fired without any loss of performance. C8729 is an excellent choice for electrolytic plating applications, such as copper, nickel, tin, etc.

#### Key Benefits

- Excellent fired film density
- Low resistivity
- High adhesion
- High speed printing
- Feed through hole application
- Pb, Cd and Ni free
- REACH<sup>1</sup> and ROHS<sup>2</sup> compliant

#### Typical Properties

##### Resistivity

< 2.5 mΩ/□ at 12 μm fired film thickness

##### Adhesion (after plating)

2 x 2 mm pad

Initial: ≥ 10.0 lbs  
 Aged: ≥ 8.0 lbs  
 (500 hours @ 150 °C)

500 thermal cycles  
 (-55 °C to +125 °C): ≥ 10.0 lbs

##### Al Wire Bondability

1.25 mil

Initial: > 20.0 g  
 500 hours @ 150 °C: > 10.0 g

\*Note: failure mode: wire breaks

Initial: > 600.0 g  
 500 hours @ 150 °C: > 550.0 g

\*Note: failure mode: wire breaks

##### Solderability

Sn62/Pb36/Ag2 at 230 °C

10 second dips, RMA flux

	#of Dips	% Line Loss
	1	10 %
After plating	6	5 %

#### Coverage

80 cm<sup>2</sup>/g at 12 μm fired film thickness

#### Viscosity

60 – 100 Kcps Brookfield HBT

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

#### Solids

81.5 ± 1.0 %

#### Recommended Processing Guidelines

##### Printing

280 mesh stainless steel screen

0.5 mil emulsion

##### Printing Speed

Up to 7 in/sec

##### Coverage

80 cm<sup>2</sup>/g at 12 μm fired film thickness

##### 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: 32 – 34 μm

Dried: 22 – 26 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)

**Heraeus Electronics**  
Heraeus Deutschland GmbH & Co. KG  
Heraeusstraße 12 – 14  
63450 Hanau, Germany  
[www.heraeus-electronics.com](http://www.heraeus-electronics.com)

**Americas**  
Phone +1 610 825 6050  
[electronics.americas@heraeus.com](mailto:electronics.americas@heraeus.com)

**China**  
Phone +86 21 3357 5457  
[electronics.china@heraeus.com](mailto:electronics.china@heraeus.com)

**Asia Pacific**  
Phone +65 6571 7677  
[electronics.apac@heraeus.com](mailto:electronics.apac@heraeus.com)

**Europe, Middle East and Africa**  
Phone +49 6181 35 3069, +49 6181 35 3627  
[electronics.emea@heraeus.com](mailto:electronics.emea@heraeus.com)