

Conductors

SOL952

Front Side Silver for Solar Cells

Description:

SOL952 is a front side Ag conductor for single and multicrystalline silicon solar cell wafers. It easily penetrates the SiN_x:H anti-reflective coating during the firing process and provides low contact resistance. SOL952 can be co-fired with commercially available backside Al and Ag/Al pastes.

● **Key Benefits:**

- High Efficiency
- Low Series Resistance
- Excellent Line Resolution
- Co-fireable with backside Al and Ag/Al paste
- Cd free
- Wide process window

● **Typical Properties:**

Viscosity

180-240 Kcps; Brookfield HBT SC4-14 spindle and 6R utility cup @ 10 rpm, 25°C

Solids:

84.0 ± 1%

Solderability:

5 second dip @ 230°C
62Sn/36Pb/2Ag, RMA Flux
Excellent

Wafer Types:

Mono and multi crystalline

● **Recommended Processing Guidelines:**

Printing:

Stainless steel screen:
280 mesh, 25 µm wire or 325 mesh, 23 µm wire
20-30 micron emulsion

Drying:

Typically dried in an IR dryer with set points of 250-300°C in less than 20 seconds or 150°C for 10 minutes in circulated air oven.

Firing:

IR Furnace with Actual Wafer
Peak Temperature at 740 -800°C
Omega thermocouple KMQXL-020G-18

Thickness:

Fired: 15-20 microns

Line Resolution (finger width):

100-150 micron

Thinner:

RV-617

Warranty:

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

Storage:

Store in a dry location at 5°C-25°C.
DO NOT REFRIGERATE.
Allow paste to come to room temperature prior to opening.
Spatulate well before using.

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The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application.

Americas
Heraeus Materials Technology LLC
PV Materials Group
24 Union Hill Road
West Conshohocken, PA 19428
USA
Phone: +1 (610) 825-6050
E-Mail: techservice.hcd@heraeus.com
Internet: www.pvsilverpaste.com

Europe
W.C. Heraeus GmbH
Thick Film Materials Division
Heraeusstr. 12-14
63450 Hanau
Germany
Phone: +49 (6181) 35-5466
E-mail: th-info@heraeus.com
Internet: www.heraeus-thickfilm.com

Asia
Heraeus Materials Technology
Shanghai Ltd.
No. 1 Guang Zhong Road
Zhuanqiao Town, Minhang District
Shanghai 201108
People's Republic of China
Phone: + 86 (21) 6442-6838
E-Mail: th.hmmts@heraeus.com
Internet: www.heraeus-thickfilm.com