

Conductors

C8710M



Thick Print Silver Conductor

Description:

C8710M is an unfritted lead and cadmium free Ag conductor designed for thick print applications. In a single print and fire application, C8710M yields a thick, dense film that is free from blisters, cracks, and other cosmetic defects. It exhibits excellent solderability and low resistivity. C8710M has good adhesion when printed over a base layer of C4740L or other silver based Heraeus conductors. It is not designed to be used without a base layer. C8710M is an excellent choice for low cost, high conductivity applications that require very thick conductor traces.

● **Key Benefits**

- Low resistivity
- Good cosmetics up to 80 microns
- Excellent solderability
- Pb and Cd free

● **Typical Properties:**

Resistivity:

< 2.2 milliohms per square
at 12 microns fired film thickness.

Solderability:

3 second dip @ 225°C
62Sn/36Pb/2Ag, RMA
≥ 95%

Viscosity

180-220 Kcps Brookfield HBT
SC4-14 spindle and 6R utility cup
@ 10 rpm, 25°C

Solids:

85% ± 1%

● **Recommended Processing Guidelines**

Printing:

80 mesh stainless steel screen
5 mil emulsion

Drying:

Dry at 150°C for 10 - 20 minutes

Firing:

850°C peak temperature
Dwell time of 8-12 minutes

Thickness:

Dried: 100 - 120 microns
Fired: 50 - 70 microns (over a 12-14 micron print of C4740L)

Thinner:

RV-507 (Texanol)

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.

YY0307.5

Conductors

C8710M



Thick Print Silver Conductor

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 Incorporated
Thick Film Materials Division
24 Union Hill Road
West Conshohocken, PA 19428
USA
Phone: +1 (610) 825-6050
E-Mail: techservice.hcd@heraeus.com
Internet: www.thickfilm.net

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-th.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.hmts@heraeus.com
Internet: www.heraeus-th.com