

Component Metallization

10-074HF

Silver Conductor

Description:

10-074HF is a silver bearing conductor paste designed to screen print solderable electrodes onto a variety of electrical ceramic component devices. The fired film forms a highly adherent bond to many types of substrates, including piezoelectric transducers (PZTs), NTC thermistors, alumina, steatite and porcelain. The metalized electrode is solderable for external lead attachments.

● **Key Benefits:**

- Excellent adhesion
- Excellent solderability
- Compatible on piezoelectric transducers (PZTs), NTC thermistors, alumina, steatite and porcelain

● **Typical Properties:**

Viscosity

35-50 kcps Brookfield RVT
Spindle #7, at 20 rpm, 25°C

Resistivity:

< 3.0 milliohms per square
at 25 microns fired film thickness.

Adhesion:

62Sn/36Pb/2Ag at 200°C
0.10 in x 0.10 in

Initial: > 6 lbs.

Solderability:

10Sn/88Pb/2Ag at 210-230°C
2-3 seconds dip

100% Solderability

● **Recommended Processing Guidelines:**

Printing:

100-250 mesh steel screen
0.3-1.0 mil emulsion

Drying:

Dry at 100-150°C for 10-15 minutes

Firing:

725-850°C peak temperature
Dwell time 8-12 minutes at peak temperature
Cycle time of 45-60 minutes
Larger parts may require a longer firing profile

Thickness:

Fired: 9-12 microns

Thinner:

RV-252 (Butyl Carbitol Acetate)

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
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-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) 3357-5688
E-Mail: th.hmts@heraeus.com
Internet: www.heraeus-thickfilm.com