

## Technical Data Sheet

### THICK FILM MATERIALS

**Product Type:** Component Metallization

**Product Name:** 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 mΩ/□ at 25 μm fired film thickness

###### Adhesion

Sn62/Pb36/Ag2 at 200 °C  
100 x 100 mil pads  
Initial: > 6 lbs

###### Solderability

Sn10/Pb88/Ag2 at 210 – 230 °C,  
2 – 3 seconds dip  
100 %

##### Recommended Processing Guidelines

###### Printing

100 – 250 mesh stainless steel screen  
0.3 – 1.0 mil emulsion

###### Drying

100 – 150 °C for 10 – 15 minutes

###### Firing

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

###### Thickness

Fired: 5 – 9 μm

###### Thinner

RV-252

###### 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.

**Heraeus Electronics**  
Heraeus Deutschland GmbH & Co. KG  
Heraeusstraße 12 – 14  
63450 Hanau, Germany  
www.heraeus-electronics.com

**Americas**  
Phone +1 610 825 6050  
electronics.americas@heraeus.com

**Asia Pacific**  
Phone +65 6571 7649  
electronics.apac@heraeus.com

**China**  
Phone +86 53 5815 9601  
electronics.china@heraeus.com

**Europe, Middle East and Africa**  
Phone +49 6181 35 4370  
electronics.emea@heraeus.com