Heraeus

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

 $< 3.0 \text{ m}\Omega/\square$ 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 %

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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: $5-9 \mu m$

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.

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