

PC10899

Component Metallization

Description

PC10899 is a low temperature firing silver 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 piezo-electric transducers (PZTs), NTC thermistors, alumina, steatite, and porcelain. The metalized electrode is readily solderable for external lead attachment.

Key Features

- RoHS compliant* REACH compliant** Lower firing temperature (< 700°C) Screen printable Excellent solderability Designed for piezo-electric transducers (PZTs), NTC thermistors, alumina, steatite, and porcelain



Typical Properties

Viscosity	80 – 100 kcps Brookfield HBT SC-14 spindle & 6R utility cup @ 10 rpm, 20°C
Resistivity	≤ 4.0 milliohms per square @ 25 microns fired film thickness.

Recommended Processing Guide

Printing Parameters	60-250 mesh stainless steel screen 0.7 -1.0 mil emulsion Allow parts to level at room temperature for 10 minutes before drying.
Drying Temperature	100-150°C for 10-15 minutes
Process Temperature (TDS)	650-700°C peak firing temperature Dwell time of 8-12 minutes at peak Total cycle time of 45-60 minutes. Larger parts may require a longer firing profile.
Film Thickness	9 - 15 microns

PC10899

Component Metallization

Recommended Processing Guide (continued)

Recommended Thinner

Heraeus RV-100

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

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 particular application. The Heraeus logo and Heraeus, figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.

PC10899

Component Metallization

Warranty

Material guaranteed to meet specifications for 6 months from date of manufacturing with proper storage.

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.

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

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 particular application. The Heraeus logo and Heraeus, figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.