

Technical Data Sheet



THICK FILM MATERIALS

Product Type: LTCC Materials

Product Name: TC0306A



Co-Firing Silver Conductor

Description

TC0306A is a pure Ag conductor with low resistivity and superior fine line print resolution. TC0306A has been formulated to be a single print co-fired surface conductor providing excellent solderability and adhesion with HeraLock® HL2000.

TC0306A is optimized for screen printing as a surface conductor. The material may readily be used to print fine line patterns.

Key Benefits

- Excellent solderability co-fired on HeraLock® HL2000
- Print fine line patterns
- REACH¹ and RoHS² compliant

Typical Properties

Resistivity:

≤ 3.0 mΩ/□ at 12 μm dried film thickness
(buried and co-fired with HeraLock® HL2000 tape)

Viscosity:

170 – 200 Kcps Brookfield HBT
SC4 – 14 spindle, 6R utility cup at 10 rpm, 25 °C

Solids:

90.0 ± 2.0 %

Solderability:

62Sn/36Pb/2Ag, at 230 °C
RMA flux, 10 sec dip
on HeraLock® HL2000
> 90 %

Adhesion:

62Sn/36Pb/2Ag, at 230 °C
RMA flux
on HeraLock® HL2000
Initial: > 5.0 lbs
Aged: > 4.0 lbs (48 hours @ 150 °C)

Recommended Processing Guidelines

Printing

250 – 325 mesh stainless steel screen

Drying

Maximum temperature 80 °C for 10 to 20 minutes

Firing:

See HeraLock® HL2000 data sheet

Fired Film Thickness:

14 – 20 μm

Line Resolution:

100 μm printed

Compatibility:

HeraLock® HL2000

Thinner:

RV-100

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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Legend:

1) REACH compliant according to the latest * Annex XIV to Regulation (EC) of the European Parliament and of the council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.

2) RoHS compliant according to the latest * Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)

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