

Technical Data Sheet



Product Type: Polymer Thick Film

Product Name: LTC3302



Polymer Silver Conductor

Description

LTC3302 is a screen printable polymer based silver conductor. It contains a fast curing, single component polymer system. LTC3302 was developed for 96% alumina, PCB, aluminum or other similar substrates. LTC3302 has low resistivity and excellent solvent resistance. LTC3302 offers excellent flow properties, smooth prints capable of printing 100 µm lines and spaces.

Key Benefits

- REACH¹ and RoHS² compliant
- Fine line printing
- Solvent resistant
- Good solder acceptance
- Multiple curing temperatures
- Ni/Sn plateable

Typical Properties

Resistivity:

≤ 35 milliohms/square/mil
when cured at 150 °C for 60 minutes

Adhesion:

Tape Test Method
Excellent Adhesion

Solvent Resistance:

Excellent

Viscosity:

70 - 120 Kcps Brookfield HBT
SC4-14 spindle and 6R utility cup @ 10 rpm, 25 °C

Solder type:

Sn62/Pb36/Ag2 @ 200 °C for 3 seconds

Solids:

73.5 ± 1.5 %

Recommended Processing Guidelines

Mixing:

Material should be thoroughly mixed prior to use.

Printing:

230 – 325 stainless steel mesh or nylon screen
0.3 – 0.5 mil emulsion thickness

Cleaning:

First clean screen with RV-540 then finish cleaning with Acetone or similar solvent.

Curing:

150 °C for 30 minutes, or
200 °C for 15 minutes, or
350 °C for 10 minutes

Cured Thickness:

15 to 20 microns

Recommended Substrates:

96 % alumina substrates
FR4 or other PCB materials.
Polymer dielectric on metal.

Thinner:

RV-540

Warranty:

Material guaranteed to meet specifications for 3 months from date of shipment

Handling & Precautions:

Use in a well-ventilated area.
Avoid contact with skin.
Wash with soap and water.

Storage:

Refrigeration at 5°C required to maintain shelf life. Allow paste to come to room temperature prior to opening container in order to prevent condensation in ink.

Spatulate well before using, as settling may occur during storage.

SPECIAL NOTE:

Some of these materials may show resistance shifts due to thermal storage. Stability baking has been shown to minimize this behavior.

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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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