

## Technical Data Sheet

### THICK FILM MATERIALS

**Product Type:** LTCC Materials

**Product Name:** TC8101



#### Co-Firing Gold Conductor

##### Description

TC8101 is a pure Au conductor, which provides excellent compatibility with Heratape Clad CT 800 and HL2000 during the co-firing process.

TC8101 is optimized for screen printing conductor tracks such as fine line patterns as a surface conductor or an internal conductor. It can be bonded with Al and Au wire.

##### Key Benefits

- Au and Al wire bondable
- Compatible with Heratape® CT800 and HL2000
- Prints fine lines
- Prints full ground planes
- Pb and Cd free

##### Typical Properties

###### Resistivity:

< 10 mΩ/□ at 12 μm fired film thickness

###### Viscosity:

380 – 480 Kcps, Brookfield HBT, #14 spindle at 10 RPM, 25 °C

###### Solids:

84.5 ± 1.0 %

###### Wire Bond Adhesion:

1 mil Au	≥ 8 g
2 mil Au	≥ 20 g
10 mil Al	> 400 g

##### Recommended Processing Guidelines

###### Printing:

325 – 400 mesh stainless steel screen  
0.5 mil emulsion

###### Drying:

Dry at 80 °C for 10 minutes

###### Firing:

Recommended profile in a box oven, with a peak temperature of 850 – 865 °C (30 minute dwell). Total firing cycle time of up to 10 hours.

###### Fired Film Thickness:

8 – 12 μm (when printed with a 325 mesh screen)

###### Compatibility:

Dielectric: Heratape® CT800 and HL2000  
Cofireable via fill: TC0101

###### Thinner:

RV-372 (Terpineol)

###### 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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