GOLD METALLO-ORGANIC CONDUCTOR

8081-A

ESL 8081-A is a thin printing metallo-organic gold that produces a fired conductive film of less than one-micrometer in thickness. It can be used for non-migrating terminations for thick film resistors and is economical because of its high coverage. It is not recommended for wire bonding or soldering because of its thinness. This conductor contains a precious metal composition that decomposes with heat at temperatures above 300°C. At temperatures near 600°C, a “thin” film with good adhesion to the substrate is formed. By printing this conductor to the exact pattern desired, it can be used for many conductive purposes in which direct wire bonding or soldering is not required.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste

VISCOITY:
(Brookfield RVT, ABZ spindle, 10 rpm, 25.5°C±0.5°C) 50±10 Pa·s

SHELF LIFE: (25°C) 6 months

PROCESSING

SCREEN MESH/EMULSION: 200-325 mesh/25-33 µm

LEVELING TIME: (25°C) 5-10 minutes

DRYING: (125°C) 10-15 minutes

FIRING RANGE:
OPTIMUM: 625°C-850°C

RATE OF ASCENT/DESCENT: 60°C-100°C/minute

SUBSTRATE FOR CALIBRATION: 96% alumina

THINNER: ESL 413

8081-A 9907-G
TYPICAL PROPERTIES

FIRED THICKNESS: < 1 µm
RESISTIVITY: < 400 mΩ/sq.

NOTES:

1. Adequate air flow and ventilation to remove the burn-off products is essential or unpleasant odors may accumulate.

2. Thinners are not normally required. ESL 413 may be used sparingly. For screen cleaning, Xylol, isopropyl alcohol, or acetone may be used.