CERMET GOLD CONDUCTOR

8886
8886-A

Thin-Printing, Etchable Conductor

ESL 8886 and 8886-A are fritless gold conductors based on a new concept. They are designed for screen printing applications as are conventional thick film materials, but provide a dense film of approximately one micrometer thick. Using two layers of 8886 or 8886-A, the fired film can be etched to a very fine line pattern without exhibiting discontinuities. ESL 8886 and 8886-A are suitable for printing on the top of most high temperature underglazes such as ESL Code129-C. The 8886-A can be refired up to 6 times without blistering.

ESL# 8886 and 8886-A are not suitable for use on bare alumina substrates.

PASTE DATA

VISCOSITY:
(Brookfield RVT, 10 rpm, No. 4 spindle, 25.5°C±0.5°C) 15-25 Pa.s

PROCESSING

SCREEN MESH/EMULSION: 325-400 mesh/0.0 μm
DRYING: (125°C) 15 minutes
FIRING TEMPERATURE RANGE:
OPTIMUM: 850°C
TIME AT PEAK: 10-12 minutes
TOTAL CYCLE: 45 minutes to 1 hour

RESISTIVITY:
1 layer < 50 mΩ/sq.
2 layers < 30 mΩ/sq.

WIRE BONDABILITY: (On glazed substrates) 1 mil Au wire or Al wire

8886 & 8886-A 0302-C
FILM THICKNESS:

1 layer 0.9-1.3 µm
2 layers 1.8-2.6 µm

REFIRING: (8886-A only)
(Two layers, separately fired, 6x at 850°C) No blisters

PRINTING:
After printing, sufficient leveling time must be provided to allow any bubbles that form to burst open and level. The dried film should be smooth and shiny before firing.