Heraeus

Technical Data Sheet



Product Type: End Terminations

Product Name: ET1840



Silver / Platinum / Palladium

Description

ET1840 is a lead and cadmium free Pt/Pd/Ag conductor paste. It is a high density, high reliability material, which exhibits high leach resistance, with lower resistivity values.

ET1840 is formulated to provide good conductivity while meeting the requirements of solderability, leach resistance, resistance to silver migration and high initial adhesion.

Key Benefits

- Excellent solderability and leach resistance
- Low resistivity values
- Pd and Cd free

Typical Properties

Resistivity:

 $\leq 35.0~\text{m}\Omega/\square$ at $9.5~\mu\text{m}$ fired film thickness

Viscosity:

300-400 Kcps Brookfield HBT SC4 -14 spindle, 6R utility cup at 10 rpm, 25 °C

Solderability:

Sn95/Ag5 at 260 °C, 5 second dip, RMA flux ≥ 95 % coverage

Solder Leaching:

Sn95/Ag5 at 260 °C, RMA flux $\frac{5 \text{ second dips}}{3}$ $\frac{\text{Line lost}}{20 \%}$

Adhesion:

Sn95/Ag5 at 260 °C, RMA flux Initial: \geq 5.0 lbs

Solids:

77 % - 78.5 %

Heraeus Electronics

Heraeus Deutschland GmbH & Co. KG Heraeusstraße 12 – 14 63450 Hanau, Germany www.heraeus-electronics.com

Americas

Phone +1 610 825 6050 electronics.americas@heraeus.com

Asia Pacific

Phone +65 6571 7649 electronics.apac@heraeus.com

Recommended Processing Guidelines

Printing:

280 mesh stainless steel screen 0.5 mil emulsion 1.1 mil wire

Drying:

Dry at 150 °C for 10 minutes

Firing:

850 °C peak temperature Dwell time of 8 – 10 minutes

Thickness:

Fired $11 - 15 \mu m$

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.

China

Phone +86 53 5815 9601 electronics.china@heraeus.com

Europe, Middle East and Africa

Phone +49 6181 35 4370 electronics.emea@heraeus.com

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