

Technical Data Sheet

THICK FILM MATERIALS

Product Type: Component Metallization

Product Name: DT8832



Low Temperature Silver Termination / DPIS*
*Development Product Information Sheet

Description

DT8832 is a low temperature and screen printable pure silver termination. It is designed for larger area printing on NiCr coated PTC discs.

Key Benefits

- Excellent printing behaviour for larger area
- Excellent adhesion on NiCr coated PTC discs
- Good fired film density
- Free of nickel, cadmium and phthalate
- REACH³ and ROHS⁴ compliant

Processing

- 1) Spatulate well prior to processing.

The paste should have acquired room temperature prior to opening, to avoid condensation.
- 2) Print through a 200 – 325 mesh stainless steel screen.
- 3) Level at room temperature for 5 – 10 minutes.
- 4) Dry at 150 °C for 10 – 20 minutes
- 5) Fire at 460 – 500 °C (peak) for 2 – 10 minutes, and with a total firing cycle time of approx. 30 minutes.

Compensate lower firing temperature with longer dwell time at peak.

Thinner

HVS 507

Typical Properties (Paste)

Form	Pseudoplastic paste
Viscosity	10 – 50 Pas (25 °C, D = 100/s)
Solid Content	74.0 % ± 2.0 %
Printing Speed	Up to 10 cm / s
Shelf Life	9 months from date of shipment with correct storage (in a dry, cool (5 – 25 °C) and dark place with container tightly shut).

Typical Properties (Fired)¹

Fired Film Thickness ² (FFT)	5 – 15 µm
Resistivity ²	≤ 15 mΩ/□ (FFT: 8 µm)

Compatibility

Substrates	NiCr coated PTC discs
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Legend:

1) Typical properties based on laboratory test methods. For optimum results all materials should be fired in a profiled furnace supplied with dried, hydrocarbon and other contaminant free air (PP-1)

2) Measured on alumina 96 % after printing with a 200 mesh stainless steel screen; thickness was c.100 µm, and the resultant printed track was 500 µm wide

3) 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.

4) 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)

* See the data sheet issue date (DD/MM/YY) as reference of validity of latest edition which is available on request

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