

## Technical Data Sheet

### THICK FILM MATERIALS

**Product Type:** End Terminations

**Product Name:** ET1890A



#### Lead Free Plateable Silver End Termination

##### Description

ET1890A is a Pb and Cd free nickel plateable silver end termination designed to be compatible on Multilayer ceramic chip capacitors (NPO and X7R bodies). Nickel plating can be done without pre-plate processing due to the low glass content on the fired surface.

The rheology of ET1890A is suitable for machine dipping.

##### Key Benefits

- ROHS<sup>1</sup> compliant
- Free of lead and cadmium
- Nickel plateable-no pre-plate processing
- Low usage-excellent coverage uniformly
- Dense fired microstructure

##### Typical Properties

###### Metal type

Silver

###### Viscosity

40 – 50 Kcps, Brookfield RVT  
SC4 – 14 spindle and 6R utility cup at 10 rpm, 25 °C

###### Solids

76.5 ± 1.5 %

###### FOG

≤ 10 µm (4<sup>th</sup> scratch)

##### Recommended Processing Guidelines

###### Drying

150 – 180 °C for 8 minutes  
Peak temperature of 175 °C for 2 minutes  
20 minutes total cycle time

###### Firing Profile

Peak temp: 650 – 800 °C  
Dwell time at temp, 5 – 7 minutes

###### Thinner

RV-372

###### 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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Legend:

<sup>1)</sup> 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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