

## Technical Data Sheet

### THICK FILM MATERIALS

Product Type: End Terminations

Product Name: ET3203



### Lead Free Plateable Silver End Termination

#### Description

ET3203 is a low silver, Pb and Cd free, nickel plateable, end termination. It is designed to be compatible on inductor bodies, multi-layer varistors and 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 ET3203 is suitable for machine dipping.

#### Key Benefits

- Low Ag content (63 %)
- Nickel plateable no pre-plate processing
- Low usage excellent coverage uniformity
- Dense fired microstructure
- Pb and Cd free
- REACH<sup>1</sup> and ROHS<sup>2</sup> compliant

#### Typical Properties

##### Metal Type

Silver

##### Viscosity

25 – 35 Kcps Brookfield RVT

SC4 – 14 spindle, 6R utility cup at 10 rpm, 25 °C

##### Solids

83.0 ± 1.0 %

##### FOG

≤ 10 µm (at 4<sup>th</sup> scratch)

#### Recommended Processing Guidelines

##### Drying

150 °C for 10 minutes

20 minutes total cycle time

##### Firing

650 – 800 °C peak temperature

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 20 – 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:

1) 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.

2) 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)

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