Micromax™ 5424

Electronic Inks and Pastes

Platable C1 Termination for Chip Resistors Applications

Specially developed for chip resistors applications, Micromax™ 5424 is a high performance platable silver/palladium C1 termination.

Product characteristics

- High resolution screen printing
- High green strength
- Fast firing — 850 °C/30min. profile
- High acid resistance
- Excellent post-plating adhesion
- Cadmium free
- 2% palladium content

Product information

Solvent or thinner	Micromax™ 4553

Rheological properties

Viscosity	150 - 250[1]	Pa.s

[1]: Brookfield HBT, UC&S, 10 rpm, 25 °C ± 1 °C

Application technique

Mask mesh	250	
Mask emulsion	8	µm
Drying time	10	min
Drying temperature	150	°C
Recommended film thickness, dried	16 - 20	µm
Leveling time	5 - 10	min

Storage and stability

Shelf life	6[2]	months

[2]: in unopened containers, from date of shipment, at temperature <25 °C

Additional information

How to use

Processing

- Substrates
  - Reported properties are based on tests with 96% alumina substrates. Substrates of other compositions may yield variations in performance properties.

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- Printing
  - Properties are based on Micromax™ 5424 printed to 18±2µm dried print thickness using 250 mesh stainless steel screen with an emulsion thickness of approximately 8µm.
- Thinning
  - Micromax™ 5424 is optimized for screen printing and thinning is not normally required. For minor adjustments, thinner Micromax™ 4553 is recommended.
- Clean-up solvent
  - While traditional screen cleaners work with Micromax™ 5424, Axarel® 2200, a non CFC alternative, is recommended.
- Drying
  - Prints should be allowed to level at room temperature for 5-10 minutes and then dried for 10 minutes at 150°C.
- Firing
  - Properties are based on a 30 minute firing cycle with 10 minutes at a peak of 850°C. Equivalent performance is obtained on a 60 minute firing cycle with 10 minutes at a peak of 850°C.

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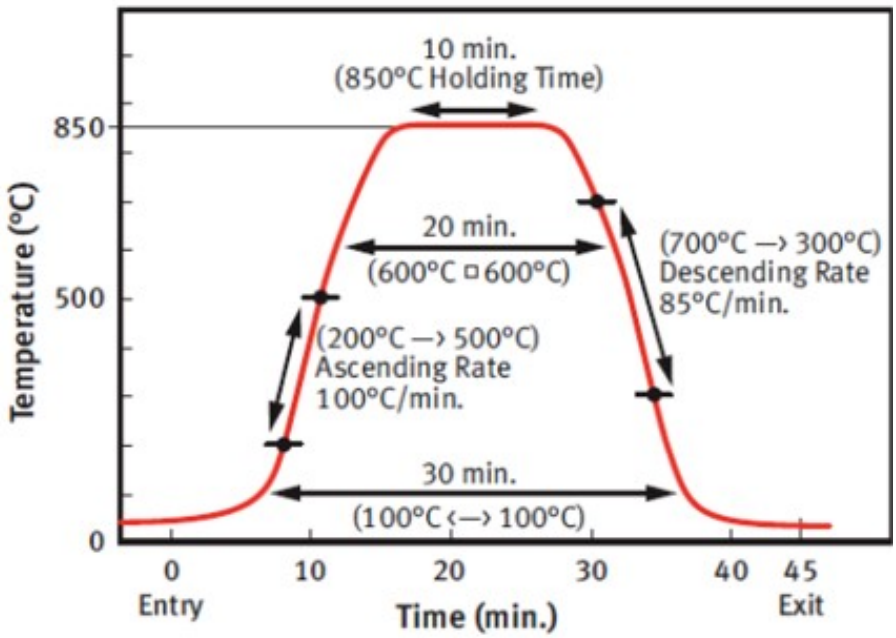
Micromax™ Standard Profile 850°C x 10 min., 30 min.

(Micromax™ QA Profile)



Properties

- Information in this datasheet shows anticipated typical physical properties for Micromax™ 5424 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

Storage and shelf life

Containers should be stored, tightly sealed, in a clean, stable environment at room temperature (<25°C). Shelf life of material in unopened containers is six months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

Safety and handling

For safety and handling information pertaining to this product, read Safety Data

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Sheet (SDS).

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