

# Micromax<sup>TM</sup> QF482

## **Electronic Inks and Pastes**

#### **Crossover Dielectrics**

## **Product information**

Solvent or thinner Micromax™ 9180

## Rheological properties

Viscosity 150 - 190<sup>[1]</sup> Pa.s

[1]: Brookfield HAT, UC&S #14, 10 rpm, 25°C

## Application technique

 $\begin{array}{cccc} \text{Mask mesh} & 200 - 325 \\ \text{Drying time} & 10 - 15 & \text{min} \\ \text{Drying temperature} & 150 & ^{\circ}\text{C} \\ \text{Theoretical coverage} & 70 - 75^{[2]} & \text{cm}^2/\text{g} \\ \text{Recommended film thickness, fired} & 40^{[3]} & \mu\text{m} \\ \text{Leveling time} & 5 - 10 & \text{min} \\ \end{array}$ 

[2]: Based on 30µm fired thickness using 2 points with a 325 mesh stainless steel screen (Based on 40µm and 200 mesh, 55 - 60 cm²/g)

[3]: 2 fired layers, 200 or 325 mesh screen, between metal layers

## Electrical properties

[4]: Measured at 100 VDC

[5]: HBT 150°C/200 VDC/1000 hr.

[6]: HHBT 85°C/85%R#/5VDC/1000 hr.

[7]: VAC at 25µm

## Storage and stability

Shelf life 6<sup>[8]</sup> months

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

#### Additional information

How to use Processing

#### Substrates

Properties are based on tests on 96% alumina substrates.
Substrates of other compositions and from various manufacturers

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may result in variations in performance properties.

## Printing

 Print two dielectric layers with a 200 or 325 mesh stainless steel screen. The combined thickness of the fired dielectric should be at least 30μm (1.2mil). Printing speeds up to 25 cm/s (10 in/s) can be used for crossover areas as large as 25 cm².

## Drying

 Allow prints to level for 5-10 minutes at room temperature. Dry 10-15 minutes at 150°C in air.

## Firing

 Each dielectric print should be fired in a belt furnace. Use a 30 minute cycle with a peak temperature of 850°C for 10 minutes.

## **Properties**

 All values reported here are results of experiments in our laboratories intended to illustrate product performance potential with a given experimental design. They are not intended to represent the product's specifications.

## 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 Sheet (SDS).

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