Micromax™ 6277

Electronic Inks and Pastes

Silver/Palladium Conductor

Micromax™ 6277 is a general purpose microcircuit conductor offering excellent adhesion, fired density and wide processing latitude. It has been designed to give high yields and to be cost-effective in demanding, commercial circuit applications.

Product benefits

- High thermal cycle and long term aged adhesion
- Broad process latitude : insensitive to firing temperature, profile, refiring and thickness
- Excellent solderability
- Compatible with Micromax™ QS87 Resistor Series

Product information

Solvent or thinner	Micromax™ 4553

Rheological properties

Viscosity	100 - 180[1]	Pa.s

[1]: Brookfield HBT, UC&SP, #14, 10rpm, 25 °C

Application technique

Mask mesh	200 - 325[2]	
Mask emulsion	10 - 15	µm
Drying time	10 - 15	min
Drying temperature	150	°C
Recommended film thickness, fired	13 - 17	µm
Print resolution, lines	110 - 140[3]	µm
Leveling time	5 - 10	min

[2]: Screen Types: Stainless steel

[3]: using 125µm/125µm

Specific Application Suitability

Solder leach resistance	6 - 8[4]	cycles

[4]: On Al2O3. Cycle consists of dip in mildly-activated flux (Alpha 611), 10-second dip in solder (62Sn/36Pb/2Ag solder at 230 °C) and washing off flux residue. Equivalent results for 30 or 60 firing profiles.

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Electrical properties

Surface resistivity	≤18[5]	mOhm per square

[5]: @15µm

Storage and stability

Shelf life	6[6]	months

[6]: in unopened containers, from date of shipment, at room temperature (<25°C)

Additional information

How to use

Design & compatibility

- Compatibility
  - No significant shifts in Resistivity or TCR when used to terminate Micromax™ QS87 Resistors.

Processing

- Printing
  - Micromax™ 6277 prints easily using 200-325 mesh stainless steel screens with a 10-15 µm emulsion, at printing speeds up to 25 cm/s (10in/s).
- Drying
  - Allow prints to level at room temperature, then dry in a well ventilated oven or belt dryer.
- Firing
  - Fire in well ventilated moving conveyor furnace, in air with a 30-60 minute cycle to a peak temperature of 850°C.

Properties

Typical Physical Properties

Test	Properties
Solder Acceptance*1 on Al_2O_3	Excellent

*1 Excellent characterized as greater than 95%, wetting smooth solder film after 5 seconds dip in 62Sn/36Pb/2Ag solder at 220°C using mildiy-activated flux. Equivalent results for 30 or 60 minute firing prosiles.

Information in this datasheet shows anticipated typical physical properties for Micromax™ 6277 based on specific controlled experiments in our labs and are not intended to represent the

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product specifications, details of which are available upon request.

Storage and shlef 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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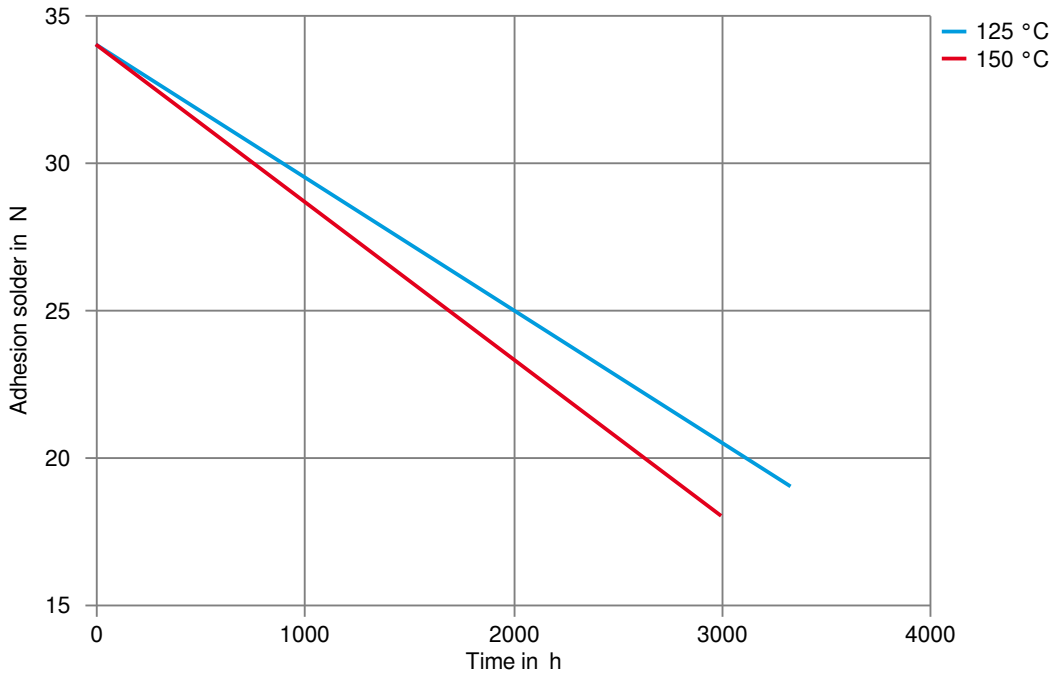
Adhesion solder after heat ageing 0



Revised: 2023-08-21 Source: Celanese Materials Database