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Technical Datasheet

Partner Paste RMA-6 FMQ Tin/Lead No Clean Solder Paste

Product Description

Partner Paste RMA-6 FMQ is a ready to use tin/lead, no-clean solder paste for use in air or nitrogen reflow applications and provides excellent print and reflow characteristics. Print speeds can be achieved up to 100mm/s with excellent print characteristics down to 16-20 mils pitch. The post soldering residues of **Partner Paste RMA-6 FMQ** are very low and concentrated around the pad. **Partner Paste RMA-6 FMQ** is a no clean formulation therefore the non corrosive residues can stay on the board after reflow and will not interfere with in-circuit testing. **Partner Paste RMA-6 FMQ** provides a long tack life of up to 24 hours and a long stencil life of up to 8 hours. The paste flux composition allows reflow profiles with a peak temperature from 215°C up to 235°C gives a wide process window. **Partner Paste RMA-6 FMQ** is available in tin/lead 63/37 and tin/silver/lead 62/2/36 specifications.

Performance Characteristics:

- Classified per J-STD-004 as: RoL0
- Classified per EN 61190 -1-1:RoL0
- Bright, shiny solder joints
- Long tack time up to 24 hours.
- Excellent print results with 16 and 20 mils pitch.
- Stable wetting behaviour over a wide range of profiles.
- Very long stencil life of over 8 hours.

Physical Properties:

(Data given for Sn62Pb36Ag2 90,5% metal, -325+500 mesh)

- Viscosity: (typical): 185 Pas
Malcom viscosimeter @ 10 rpm and 25°C
 - Initial Tackiness (typical): 129 gf
Tested to J-STD-004, IPC-TM-650, Method 2.4.44
 - Slump Test: pass
Tested to JIS-Z-3284 Appendix 7; Appendix 8
 - Solder Ball Test: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.4.35
- Thixotropic index: 057
- Wetting Test: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.4.45

Reliability Properties:

- Copper Mirror Corrosion: Low
Tested to J-STD-004, IPC-TM-650, Method 2.3.32
- Silver Chromate Test: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.3.33
- Chlorides and Bromides: None detected
Tested to J-STD-004, IPC-TM-650, Method 2.3.35
- Corrosion Test: Low
Tested to J-STD-004, IPC-TM-650, Method 2.6.15
- Fluoride by Spot Test: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.3.35.1
- SIR:
Tested to J-STD-004, IPC-TM-650, Method 2.6.3.3
Data given for Sn62Pb36Ag2

	Reference	RMA-6
Day 1	9.0 E9	1.5 E 9
Day 4	4.9 E 9	1.0 E 9
Day 7	4.5 E 9	1.0 E 9

Electrochemical migration: Pass



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Partner Paste RMA-6 FMQ No Clean Solder Paste

Standard Application:

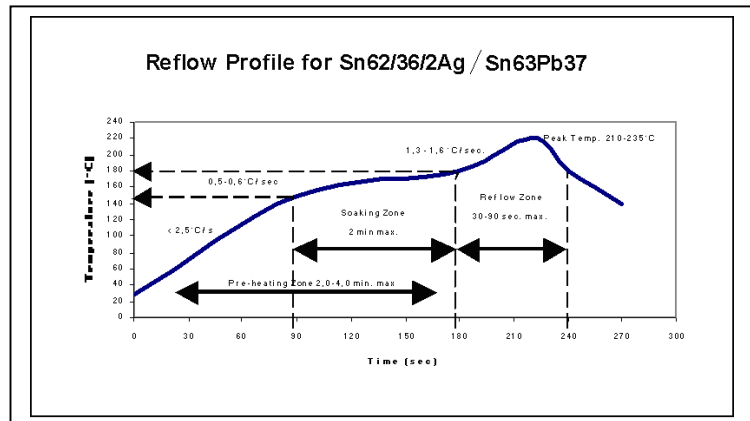
90.5-90% Metal for Stencil Printing

87% Metal for Dispensing

Partner Paste RMA-6 FMQ is available in Type 3 powder from 45-20 micron which is normally recommended for fine pitch applications. Type 4 powder from 20-38 micron is also available

Recommended Reflow Profile:

The recommended reflow profile for **Partner Paste RMA-6 FMQ** offers a wide process window allowing adjustment to suit component board loadings. The illustrated profile is based on a full convection reflow system using Sn62Ag2Pb36 alloy.



Printing Parameters:

Squeegee Blade

80-90 durometer polyurethane or stainless steel

Squeegee Speed

Capable to a max. printing speed of 150mm/sec

Stencil material

Stainless steel

Temperature/Humidity

Optimal conditions are 21-25°C and 35-65% humidity.

Cleaning:

Partner Paste RMA-6 FMQ is a no clean formulation, the residues left on the board are non-conductive and non corrosive and do not require removal in most applications. Although it is a No Clean formulation, the residues can be easily removed with a variety of cleaning agents used in automated cleaning systems.

Packaging:

Jars: 250g, 500g

Syringe: 5cc, 10cc, 30cc,

Cartridges: 500g, 1000g

DEK ProFlow cassette

Storage and shelf life:

It is recommended that **Partner Paste RMA-6 FMQ** is stored in clean dry conditions with temperature 5-10°C to maintain consistent reflow and print characteristics. **Partner Paste RMA-6 FMQ** should be equalized to room temperature prior to printing (minimum 8 hours). Do not use excessive heating. Shelf life for jars is 6 months from date of manufacture when stored and handled under proper conditions and 4 months for syringes and cartridges stored in an upright position.

Health & Safety:

Read the material safety data sheet and warning label before use.

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