

Technical Bulletin



Solder plus Support

RMA258-15R Rosin Based Solder Paste

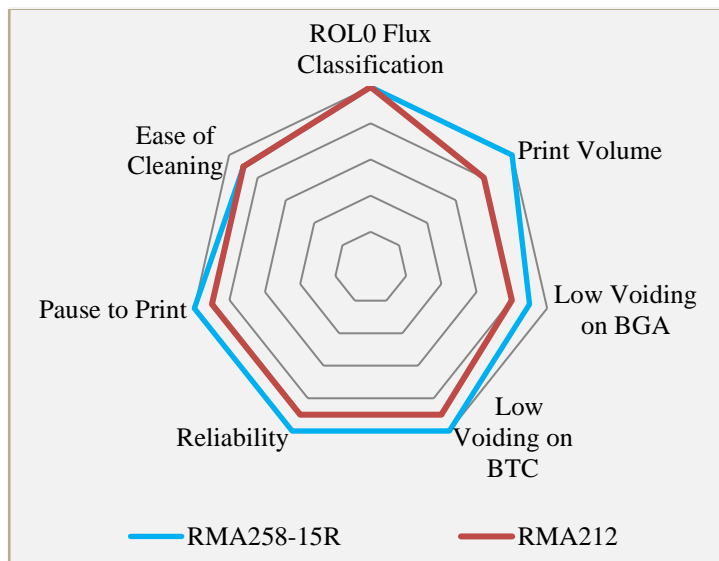
DESCRIPTION

RMA258-15R rosin based solder paste has been developed for assemblers of high reliability and military electronics. RMA258-15R offer long pause-to-print capabilities even on miniaturized devices. RMA258-15R reduces voiding on BGA/BTC and eliminates head-in-pillow defects. Powerful activators in RMA258-15R produce bright, smooth and shiny solder joints. RMA258-15R is capable of withstanding long hot reflow profiles common to high mass assemblies such as backplanes and power management. RMA258-15R residues have been formulated for removal in vapor degreaser, solvent and saponified wash systems.

FEATURES AND BENEFITS

- Long Pause-to-Print Capabilities
- Excellent Wetting. Even Leadless Devices
- Enhances Fine Print Definitions
- Exceptional Reflow During Long, Hot Profiles
- ROL0 per IPC J-STD-004
- Reduced Voiding

CHARACTERISTICS

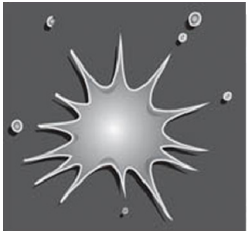


STORAGE & SHELF LIFE

Do not add used paste to unused paste. Store used paste separately; keep unused paste tightly sealed with internal plug or end cap in place. After opening, solder paste shelf life is environment and application dependent. See AIM's paste handling guidelines for further information. Alloy and storage conditions may affect shelf life. Please refer to RMA258-15R Certificate of Analysis for product specific information.

Alloy	Parameter	Time	Temperature
Lead Free	Sealed Refrigerated Shelf Life	1 Year	0°C-12°C (32°F-55°F)
Lead Free	Sealed Unrefrigerated Shelf Life	6 Months	< 25°C (< 77°F)
Leaded	Sealed Refrigerated Shelf Life	9 Months	0°C-12°C (32°F-55°F)
Leaded	Sealed Unrefrigerated Shelf Life	4 Months	< 25°C (< 77°F)

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SOLDER CONNECTION

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CLEANING

Pre-Reflow: AIM DJAW-10 effectively removes RMA258-15R solder paste from stencils while in process. DJAW-10 can be hand applied or used in under stencil wipe equipment. DJAW-10 will not dry RMA258-15R and will enhance transfer properties. Do not over-apply DJAW-10. Do not apply DJAW-10 to stencil topside. Isopropanol (IPA) is not recommended in process, but may be used as a final stencil rinse.

Post-Reflow Flux Residue: RMA258-15R residues do not require cleaning. Where cleaning is required, AIM has worked closely with industry partners to ensure that RMA258-15R residues can be effectively removed with common defluxing agents. Contact AIM for cleaning compatibility information.

HEALTH & SAFETY

Use with adequate ventilation and proper personal protective equipment. Refer to the accompanying Safety Data Sheet for any specific emergency information. Do not dispose of any hazardous materials in non-approved containers.

REFLOW PROFILE

Detailed profile information may be found at <http://www.aimsolder.com/reflow-profile-supplements>.

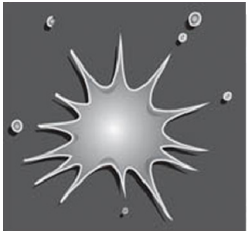
PRINTING

Recommended Initial Printer Settings - Dependent on PCB and Pad Design

Parameter	Recommended Initial Settings
Squeegee Pressure	0.9 -1.5 lbs/inch of blade
Squeegee Speed	0.5 – 6 inches/second
Snap-off Distance	On Contact 0.00 mm
PCB Separation Distance	0.75 - 2.0 mm
PCB Separation Speed	3 - 20 mm/second

TEST DATA SUMMARY

Name	Test Method	Results	
IPC Flux Classification	J-STD-004	ROLO	
Name	Test Method	Typical Results	Image
Copper Mirror	J-STD-004 3.4.1.1 IPC-TM-650 2.3.32	LOW	
Corrosion	J-STD-004 3.4.1.2 IPC-TM-650 2.6.15	PASS	
Qualitative Halides, Silver Chromate	J-STD-004 3.5.1.1 IPC-TM-650 2.3.33	PASS	
Qualitative Halides, Fluoride Spot	J-STD-004 3.5.1.2 IPC-TM-650 2.3.35.1	No Fluoride	



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Name	Test Method	Typical Results	Image
Surface Insulation Resistance	J-STD-004A 3.4.1.4 IPC-TM-650 2.6.3.3	PASS	
Flux Solids, Nonvolatile Determination	J-STD-004 3.4.2.1 IPC-TM-650 2.3.34	95.7% Typical	
Acid Value Determination	J-STD-004B 3.4.2.2 IPC-TM-650 2.3.13	133 mg KOH/ g flux Typical	
Flux Specific Gravity Determination	J-STD-004 3.4.2.3 ASTM D-1298	3.68 Typical	
Viscosity	J-STD-005A 3.5.1 IPC-TM-650 2.4.34	Print/Dispense versions available	
Visual	J-STD-004 3.4.2.5	Gray, Smooth, Creamy	
Slump	J-STD-005A 3.6 IPC-TM-650 2.4.35	PASS	
Solder Ball	J-STD-005A 3.7 IPC-TM-650 2.4.43	PASS	
Tack	J-STD-005A 3.8 IPC-TM-650 2.4.44	48.8 g Typical	
Wetting	J-STD-005A 3.9 IPC-TM-650 2.4.45	PASS	

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