

ALPHA[®] EF-6808HF & Kester[®] 985M

Broad Spectrum, High Reliability, Alcohol Based No-Clean Wave Soldering Fluxes

Best Broad-Spectrum Wave Soldering Flux

ALPHA EF-6808HF and **Kester 985M** are halide free, low solids, alcohol based, no-clean wave soldering fluxes. These fluxes exhibit wide process windows across different assemblies and create strong solder joints, including high density boards. Their excellent wetting properties help to minimize solder bridges and solder balling during all soldering operations. The residues are minimal and not apparent, excellent for pin testing.

Key Features

- Produces **highly reliable** assemblies meeting the toughest SIR/ECM requirements.
- Exhibits **excellent soldering** with improved performance in bridging and hole-fill.
- Leaves **uniform, tack free and pin testable** residues.
- Broad spectrum liquid flux for standard and high density boards.



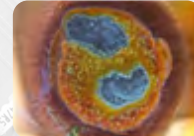
COPPER CORROSION TEST (IPC-TM-650 2.6.15)

Initial

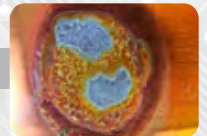
After Aging



EF-6808HF



985M

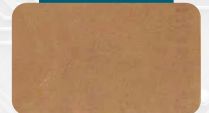
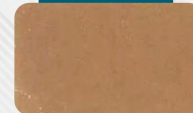


- Initial and after 10 days of exposure to 40 °C and 93% RH
- No evidence of greening or any change is observed for EF-6808HF, classified under "L" category of corrosion as per J-STD-004B
- There was minor discoloration without pitting of the copper for 985M, classified under "M" category of corrosion as per J-STD-004B

COPPER MIRROR TEST (IPC-TM-650 2.3.32)

Control

EF-6808HF



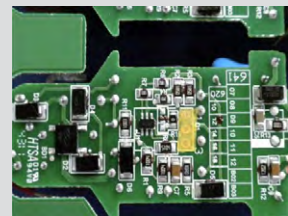
Control

985M



- No copper film was removed from the copper mirror
- "L" category corrosion per J-STD-004B

SOLDERABILITY DATA



Excellent soldering at high density, fine pitch area

alpha

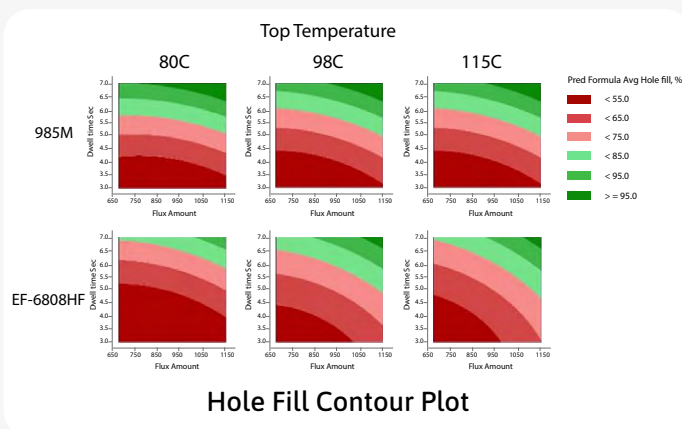
kester

ASSEMBLY SOLUTIONS

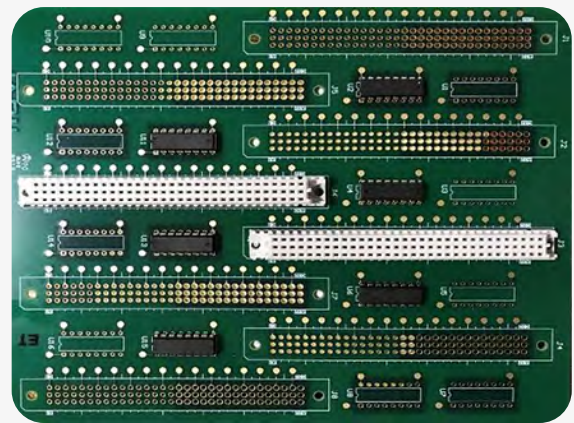
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TECHNICAL DATA	ALPHA EF-6808HF	Kester 985M	PROCESS CONTROL	ALPHA EF-6808HF	Kester 985M
Solids Content, wt/wt	4.0 %	3.6%	Flux Application	Spray	Spray
Acid Number (mg KOH/gm)	19.0	20.0	Amount of Flux Applied	800 – 1,200 µg/in ² solids	600-1200 µg/in ² solids
Specific Gravity @ 25 °C	0.793	0.805	Top-Side Preheat Temperature	80-115 °C	
IPC J-STD-004(B) Designation	ROLO	ORM0	Bottom-Side Preheat Temperature	0 to +32 °C vs. Topside	
Halogen-Free	Yes	NONE	Solder Pot	260 °C-270 °C for SnCu or SAC alloy 245-260 °C for Sn63Pb37 alloy	
SIR, IPC J-STD-004(B)	PASSED	PASSED	Contact Time	2 ~ 5 seconds	



ALPHA EF-6808HF & Kester 985M demonstrate outstanding hole-fill performance across different preheating temperatures.



Test Vehicle: Multitek PCB

PCB Thickness: 2.4mm

Solder Pot Temperature: 265 °C

Copper Layer:

4 layers, top and bottom 1 oz, two internal layers 2 oz

Component:

Four IC (16-pin), Two connectors (96-pin, 3 rows)

Alloy: SAC305

PCB Laminate: FR-4

These are general guidelines which have proven to yield excellent results. However, depending upon your equipment, components, and circuit boards, your optimal settings may be different. In order to optimize your process, it is recommended to perform a design experiment, optimizing the most important variables (amount of flux applied, conveyor speed, topside preheat temperature, solder pot temperature and board orientation).



macdermidalpha.com

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Alpha and Kester are product brands of MacDermid Alpha Electronics Solutions.

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