

An ALL-ROUND liquid flux developed in pursuit of eliminating the defect modes peculiar to lead free soldering.

JS-EU-01

New low solids formulation drastically reduces bridging, blow holes and solder balling. Significant improvement in through hole filling with OSP boards. Extremely low residue despite a powerful soldering action.

No clean ROLO	Spray	Low solids 4.0%	Applicable for SnAgCu, SnCu	Applicable for OSP	Good Thru-hole fill	Low residue	Low solder balls	High reliability
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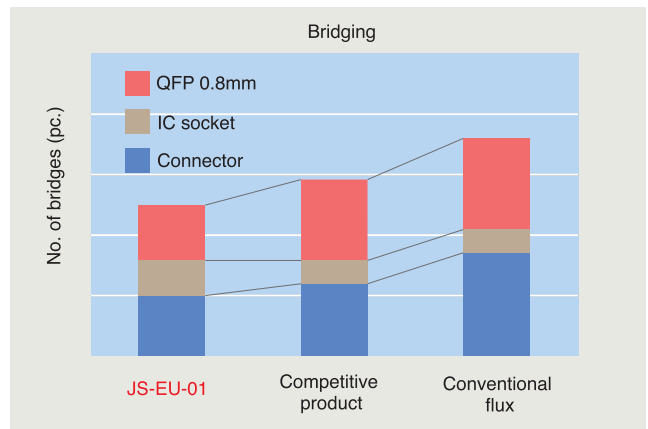
High soldering quality – Remarkably improves various soldering defects!

Thanks to the newly blended vehicle with excellent wettability on metal surfaces, it has achieved a thin and uniform flux layer. Excellent wettability is realized by removing the OSP/Oxide film

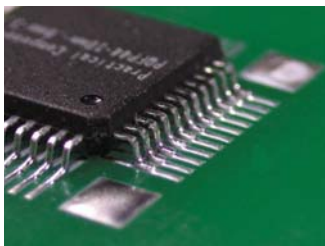
on the board pad in the preheating stage, securely preventing re-oxidization, and promptly spreading the active ingredients of the flux over the interface with the molten solder.

- Test board (fault finding design)
- 0.8mm pitch QFP : 1 pc.
 - 1.0mm pitch 16-pin connector : 4 pcs.
 - 0.8mm pitch 40-pin IC socket : 1 pc.
 - Transistor : 39 pcs.
 - Number of boards : 5 pcs.

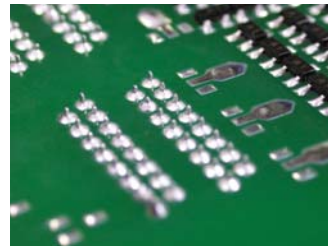
Solder alloy : SnAg3.0Cu0.5



QFP
(0.8mm; 44pin)



Connector
&
Transistor



Solder balls – New technology drastically reduces ball generation!

Many solder balls are generated on the soldering surface because of the characteristics of lead-free solder, such as inferior solder wettability and cutoff punctuality. The balls cause a decline in the direct first time pass rate, or an increase

in cleaning and adjustment costs.

A trigger for ball generation may be ill-balanced flux fluidity and the solder wetting speed.

Through-hole fill property

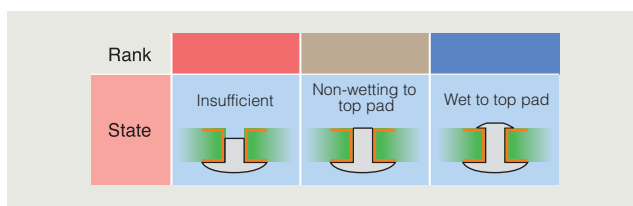
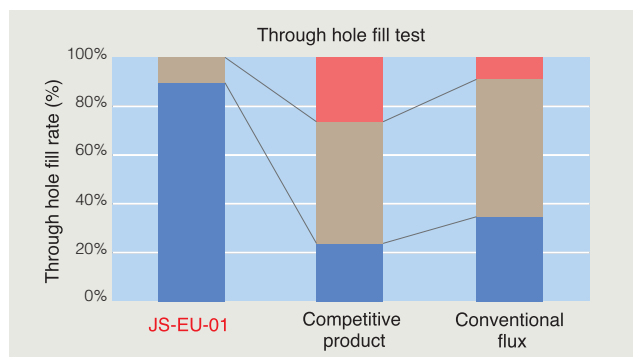
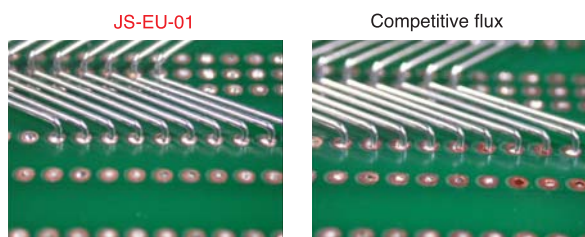
– Remarkably improved new formula!

Since the melting point of lead-free solder is relatively higher than that of Sn/Pb solder, the fluidity of the solder deteriorates, as does the through-hole fill property decline significantly because of the high surface tension and the inferior solder wetting and spreading properties of the alloy.

JS-EU-01 is a well balanced composition of various active materials to improve solder setting, and also enables fast and

sure solder wetting by evenly providing enough sustained activity materials with positive "wetting of flux over the molten solder and pad interface" realized by the new blended flux vehicle "capable of evenly wetting thinly over the metal surfaces at ambient temperature and soldering temperature".

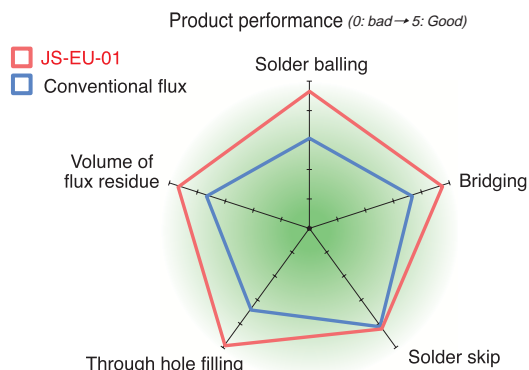
Test conditions (fault finding design board)
 Through-hole diameter : 0.8mm : 500 points
 Through-hole diameter : 1.0mm : 125 points
 Through-hole diameter : 0.6mm : 125 points
 Surface treatment : OSP
 Solder alloy : SnAg3.0Cu0.5
 Solder temp. : 250°C



Excellent total balance

As far as a solution of the faulty soldering problem is concerned, the skewed improvement of a single characteristic would rather break down the balance of the entire products, and lower performance consequently.

JS-EU-01 is an excellent product in total balance without biases toward certain characteristics, reflecting improvement on existing products in each category which affects the soldering performance of any board and components.



Specifications & Other products

Product	JS-EU-01	JS-EN-A1	JS-EN-02	JS-E-11Ni
Appearance	Colorless clear liquid	Light yellowish clear liquid	Light yellowish clear liquid	Light yellowish clear liquid
Specific gravity (at 20°C)	0.814	0.809	0.800	0.804
Non-volatile content (%)	4.0	8.4	7.1	8.0
Halide content (%)	0	0.041	0	0.032
Acid value (KOHmg/g)	26.0	20.0	20.3	--
Flux type	ROL0	ROM1	ROL0	ROM1
Solder spread factor*1 (%)	> 75	> 80	> 70	> 80
Application	Spray	Spray	Spray	Spray / Foam
Feature	As above	<ul style="list-style-type: none"> ● Powerful solderability ● Excellent thru-hole fill ● N2 recommended 	<ul style="list-style-type: none"> ● Applicable for selective soldering ● Few solder balls 	<ul style="list-style-type: none"> ● Powerful solderability ● Excellent thru-hole fill ● Few solder balls

1. Spread factor.....According to JIS-Z-3197-1999, SnAgCu with polished Cu plate.