

S3X48-M500C



- Remarkable wetting to oxidized component/substrate with powerful activation
- Realizes low voiding in Pwtr, BGA or QFN joints
- Enables a reduction of solder paste disposal by reusing it from the previous day

◆ Anti-pillow property at BGA ball joints

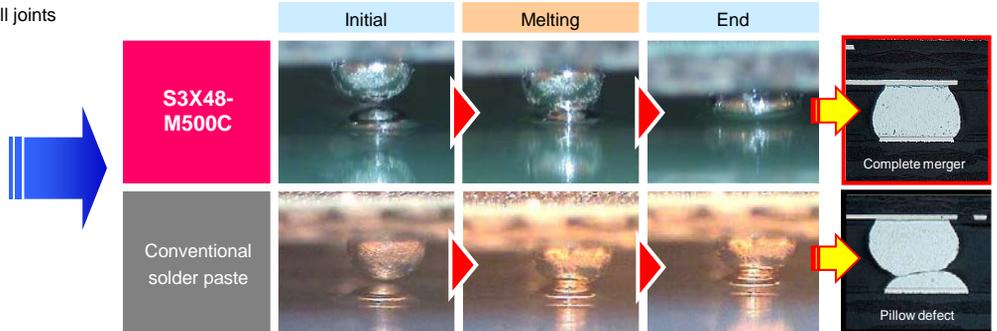
■ Pseudo test for defect of BGA ball joints

Test procedure

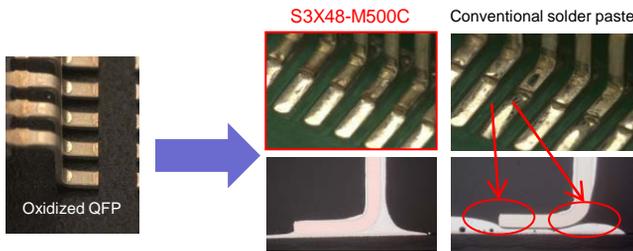
1. Oxidize BGA by heating 180°C for 100sec.
2. Print solder paste on board & reflow
3. Place the BGA on the board & reflow again

Solder bump

BGA: 196 balls / 1.0mm pitch
BGA balls: 0.63mm dia.

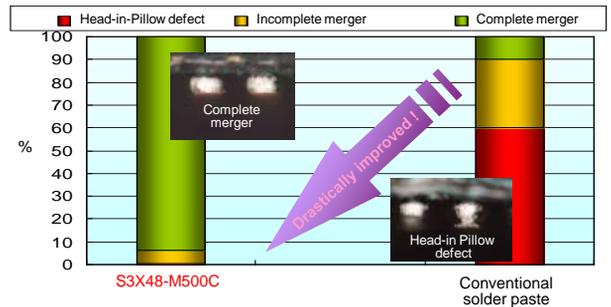


■ Comparison of wetting performance to oxidized QFP component



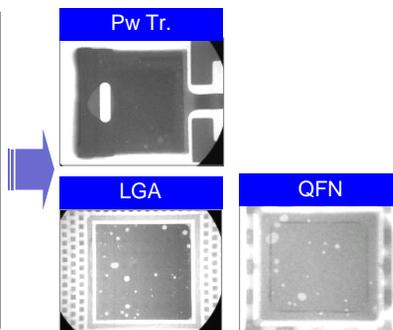
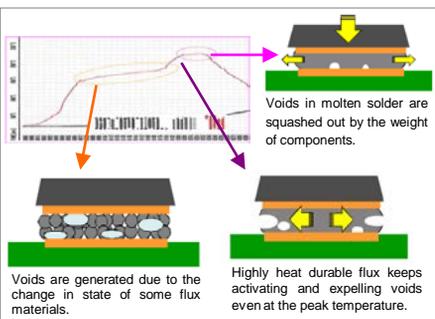
S3X48-M500C shows good fillet formation with oxidized QFP, while pillow defects occurred when conventional solder paste is used.

■ Rate of merging with BGA balls and solder

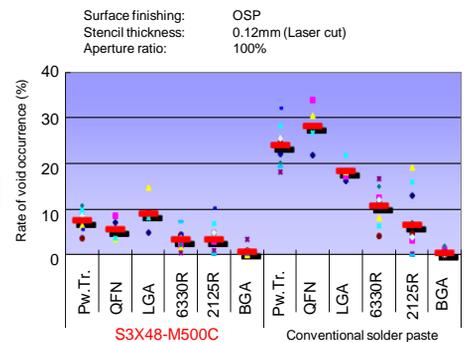


◆ Voiding property

■ Mechanism of void reduction



■ Defect rate of void occurrence in various components



◆ Product specifications

Product	S3X48-M500C
Alloy composition (%)	Sn 3.0Ag 0.5Cu
Melting point (°C)	217-219
Particle sizes (μm)	20-45
Viscosity (Pa.s)	220
Flux content (%)	11.5
Optional powder size (μm)	20-38
	Product: S3X58-M500C

*Specifications are subject to change.

◆ Other solder pastes line-up

S3X48-M500-2	Halogen free, general application
S01X7C & S1X7C48-M500C	Low Ag (0.1 & 1.0%) alloy solder paste
S3X48-M500P	Low voiding, applicable to DCB
S3X48-M406ECO	For storage at room temperature
S3X48-A230	Cleanable with water based agents
S3X70-M500D	Halogen free, dispensing type