High Reliable Lead-free Solder Paste for Automobile

Possible fine printing in the normal mask thickness AMP

Newly developed synthetic resin with enhanced water resistance

Strong Adhesion between the metal mask Weak

Mask Adhesion of solder paste affects the print characteristics.

Conventional Droplet Conventional Droplet Metalmask AMP

Metalmask Adhesion of solder paste affects the print characteristics.

Mask Mask Adhesion of solder paste affects the print characteristics.

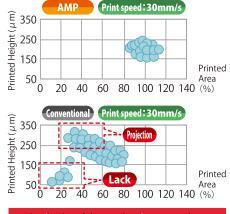
Metalmask AMP

Toplet Droplet AMP

- Friction reduction between stencil mask ➤ Fine-pitch pattern printability
- Water-resistant property ➤ Electric reliability improvement

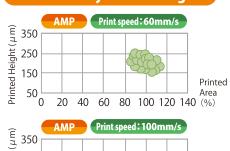
Stable Printability for Fine-pitch Pattern

Fine-pitch Printability



Application of the new development resin ►
Realize superior printability for Fine-pitch pattern

Wettability at Lead Edge



150 Printed Area Area 200 40 60 80 100 120 140 (%)

Possible stable printing ►
Shortening of the production time

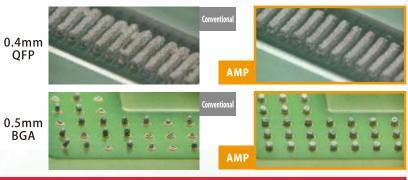
Test condition

■ **Opening size**: $275 \mu m\Phi$ ■ **Print thickness**: $150 \mu m$

Superior viscosity stability

Viscosity and Thixotropy change

(80% of paste was replaced with new paste, every 12 hours) 700 0.7 0.6 600 Thixotropic index 0.46 0.45 0.45 500 0.5 0.4 400 0.3 300 210 205 200 0.2 100 0.1 0 n 24 48 96 Time(h)



Capable soldering at 0.4mmQFP & 0.5mm BGA with 150 μ m thickness stencil mask