

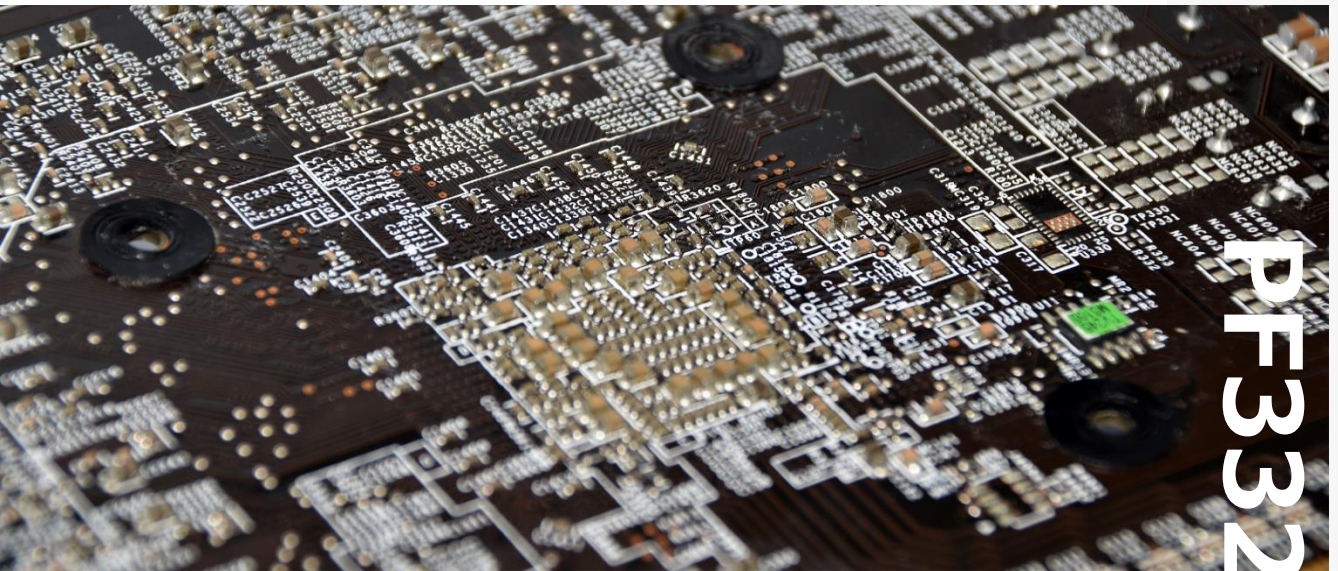
Highly reliable Pb-free solder paste for SMT

Patent No. : 6370458

PF332C-150TO(A8)

Patented Pb-free solder alloy with high reliability

- Realized low void suitable for automotive application
- Adaptable same reflow profile with SAC305's
- Prevents occurrence of chip-side balls



Solder Paste for SMT

PF332C-150TO(A8)

● General Characteristics

Item	Representative value	Test method	
Alloy Composition	Sn-3.5Ag-0.7Cu-Bi-Sb-a	-	
Solidus - Liquidus Temp.	211deg.C - 222deg.C	JIS Z 3198	
Particle Size	20 to 38µm	-	
Flux Content	11.5wt%	JIS Z 3197	
Halide Content	0.03%	JIS Z 3197	
Flux Type	ROLO	IPC J-STD-004	
Copper Plate Corrosion Test	No corrosion	JIS Z 3197	
Silver Chromate paper Test	No change	JIS Z 3197	
Corrosion Test with Copper Mirror	No change to copper mirror	JIS Z 3197	
Insulation Resistance Test	40°C90%RH after 168H	1.0×10 ¹¹ Ω or more	JIS Z 3197
	85°C85%RH after 168H	5.0×10 ⁸ Ω or more	JIS Z 3197
Tack time at 100gf or more	24 hours	JIS Z 3284	
Fluid Characteristics	Viscosity	200 Pa · s	JIS Z 3284
	Ti-value	0.55	JIS Z 3284

The above figures are representative values, not guaranteed specification. [Available customization for alloy composition, particle size and flux content.](#)

Please ask our sales staff for more details.

2020.01.001

Highly reliable Pb-free solder paste for SMT

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Patented Pb-free solder alloy with high reliability

Highly suppressed void on back electrodes

Effective to back electrodes indispensable to prevent void occurrence

Cu-chip		Power transistor	
PF332C-150TO(A8)	Other product	PF332C-150TO(A8)	Other product
<p>Void rate</p> <p>PF332C-150TO(A8) 7.1% Other product 18.6%</p>		<p>Void rate</p> <p>PF332C-150TO(A8) 8.1% Other product 14.5%</p>	

<Test condition> Printed area : 5mm×5mm×0.12mm Substrate : Cu-plate Simulant part : Ni-plate (5mm×5mm×0.5mm)
 Reflow condition : Preheat 150~190deg.C for 100sec., Peak temp. 240deg.C, 220deg.C or more for 30sec., Air reflow

Prevent occurrence of chip-side balls

Prevent to occur chip-side balls even at excessive soldering volume

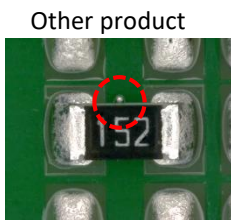
Just after printing



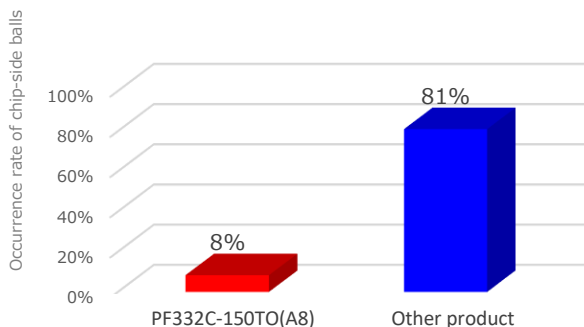
After reflow



OK



NG

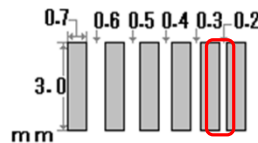
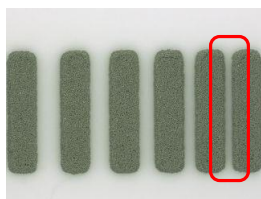
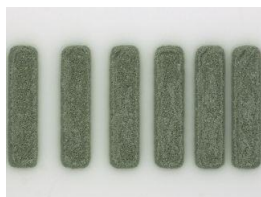


<Test condition>
 Chip size : 3.2mm×1.6mm×0.6mm
 Thickness of stencil : 0.2mm
 Push length of chip : 0.2mm
 Reflow condition : Preheat 150 to 190deg. C for 100sec.
 Peak temp. 240°C 220deg.C or more for 30sec., Air reflow

Prevent to occur heat slump

Just after printing

After reflow



[Test method] : JIS Z 3284
 Printing pattern : Above drawing, t=0.2mm
 Substrate : Ceramic plate (50mm×50mm×0.8mm)
 Heating condition : 150deg.C w/ air circulation oven

No bridge between 0.2mm

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