

ソルダ供給量に及ぼすソルダペースト中の平均粉径の影響

荏司 郁夫*, 白鳥 祐司*, 宮崎 誠**

Influence of the Diameter of Solder Powder in Solder Paste on the Applied Solder Volume by Paste Printing

Ikuo SHOHJI*, Yuji SHIRATORI* and Makoto MIYAZAKI**

*群馬大学工学部 (〒376-8515 群馬県桐生市天神町1-5-1)

**沖電気工業株式会社FSCシステム機器本部 (〒370-8585 群馬県高崎市双葉町3-1)

*Faculty of Engineering, Gunma University (1-5-1 Tenjin-cho, Kiryu-shi, Gunma 376-8515)

**Terminal System Division, FSC, OKI Electric Industry Co., Ltd. (3-1 Futaba-cho, Takasaki-shi, Gunma 370-8585)

Abstract

The influence of powder size in solder paste on the solder volume applied by paste printing has been examined. The applied solder volume increased with decreasing the average diameter of solder powder which are contained in the solder paste. The solder paste with fine solder powder easily caused a solder bridging failure between the electrodes for a fine pitch QFP after reflow soldering. The measurement value of the applied solder volume was good accordance with the approximate half of the calculated volume using the close-packed model in which the powder with the average diameter is close-packed in the opening space of the stencil.

Key Words: *Paste Printing, Solder Paste, Fine Powder, Lead-Free*