

Journal of Smart Processing
Vol. 8 No. 5 2019 (September 2019)

CONTENTS

Mate2019 特集号—第 25 回「エレクトロニクスにおけるマイクロ接合・実装技術」シンポジウム

S.P.S. Announcement N19

Preface..... Hiroshi NISHIKAWA..... 161

Research Papers

Bonding of Mold Resin to Copper Substrate through an Amorphous Interlayer Film
Yuka YAMADA and Takashi ISEKI..... 162

Influence of Thermal Fluctuation on Bonding Accuracy in Die-Attach Process
Daisuke SAKURAI, Masaru HAMAHIRA, Hiroshi NASU,
Shinji FUKUMOTO and Kozo FUJIMOTO..... 169

Formation Process of the Interface in the Ag/Si Joints by the Decomposition Reaction of Ag₂O
Tomoki MATSUDA, Kota INAMI, Keita MOTOYAMA
Tomokazu SANO and Akio HIROSE..... 177

Thermal Warp Simulation in Substrate with Properties Change of Curing Resin
Hideaki NAGAOKA, Masaharu FURUYAMA, Tomoyuki AKAHOSHI,
Daisuke MIZUTANI, Seiki SAKUYAMA,
Mami NAGATAKE and Nobutaka ITOH..... 184

Evaluation of the Influence of Defective Rate on Specific Energy Consumption
Takamasa HORIKAWA, Hironori HIBINO,
Syungo ARAI and Makoto YAMAGUCHI..... 190

Detwinning Behavior of Bismuth Single Crystals
Takamasa SAKAI, Yoshiharu KARIYA,
Hirohiko WATANABE and Hiroaki HOKAZONO..... 198

Evaluation of Stress-strain State in Power Module Sealed with Hard Resin
Containing an Interlayer with Low Elastic Modulus
Masato TAYAMOTO, Shinji FUKUMOTO,
Michiya MATSUSHIMA and Kozo FUJIMOTO..... 205

General Thesis

Optical Measurement of Surface Temperature Distribution of Weld
Pool in AC Tungsten Inert Gas Welding of Aluminum A1050
Quang Ngoc TRINH, Huy Le PHAN, Shinichi TASHIRO
Van Hanh BUI and Manabu TANAKA..... 213

Numerical Simulation of Gas Flow in a Novel Torch for Reducing Diffusible Hydrogen
Shinichi TASHIRO, Naoki MUKAI, Yoshihide INOUE
Anthony B. MURPHY, Tetsuo SUGA and Manabu TANAKA..... 219

Special Report for Mate 2019

Report on 25th Symposium on “Microjoining and Assembly Technology in Electronics”
Michiya MATSUSHIMA..... 225

S.P.S. News N20