

樹脂をコアとするはんだ接合材料の熱伝導性について

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The Thermal Conductivity of Solder Joint Material with Plastic Core

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Abstract

We have developed a solder joint material with a plastic core. In this paper, we report on the thermal conductivity of this material. We evaluated the thermal resistance θ_{j-a} with 352 pin EBGA and 352 pin PBGA, and also carried out a thermal conductivity analysis using computer simulation. The result show that the θ_{j-a} of the 352 pin EBGA was 12°C/W, and the θ_{j-a} of the 352 pin PBGA was 20°C/W. So this material is applicable to high frequency and power packages (CPU, MCM, MCP, stacked package and so on).

Key Words: Solder Joint Material, BGA, Plastic Core, Thermal Conductivity, Thermal Resistance, θ_{j-a}