

Characterization and investigation of performance of Sn–Bi alloy used as a thermal interface material

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Abstract

The proliferation of electronic technology has resulted in the miniaturization of electronic devices while simultaneously leading to a huge increase in the power density of gadgets. Due to this, the devices need to have better heat dissipation system to provide a high level of performance. Additionally, the compactness and performance characteristics of high speed and high power electronic components require efficient heat dissipation for the development of electronic equipment with high reliability. One of the most important issues in meeting the aforementioned difficulty is thermal control. The Thermal Interface Material, also known as TIM, is an important component in the process of thermal regulation. In comparison to traditional thermal interface materials (TIMs) like thermal