

Advances in Thermal Management

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High power density applications have created a need for new high thermal conductivity epoxy adhesives. Epoxy Technology has investigated the mechanism of thermal conductivity in silver filled electrically conductive epoxy adhesives. We utilized laser flash testing and SEM cross sections to determine how silver flake distribution effected thermal conductivity. We found cure, interface, and processing all play a significant role in an epoxy adhesives thermal conductivity and to better simulate in part resistance we propose a new laser flash sample preparation.