Study of Heat Radiation Materials Using High Thermal Conductivity Organic Fiber for Electronic Components and Power Devices

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Radiation of heat generating from electronic parts has now become a significant issue along with achievement of downsizing, densification and high efficiency of the electronic equipment. To cope with this issue, high thermal conductivity greases and electronic boards making use of high heat conduction ceramic and carbon have been developed. We have paid attention to an organic fiber which has high thermal conductivity in a fiber direction. We have fabricated and tested heat radiation sheets and boards using a high thermal conductivity organic fiber for electronic components and power devices. Further we have tested the heat radiating property of this heat radiation sheet which is inserted between IGBT modules and a heat sink in a chopper device.