

**Material Properties and Heat Radiation Effect of Thermal Conducting Sheets
Used for the Power Devices of Trains**

Tenko FUKUDA Hiroki KAMIJO

The radiation of heat generated from electronic parts has now become a significant issue along with the achievement of the downsizing, densification and high efficiency of the electronic equipment. To cope with this issue, high thermal conductivity grease and sheets have been developed. We have paid attention to three kinds of thermal conducting sheets as heat radiation material attached between the power devices and the heat sinks of railway vehicles. We measured the thermal resistance when the sheets were attached between the power device and the heat sink and the thermal conductivity of the sheets themselves. In this paper, we report on the relations between the thermal resistance and the thermal conductivity.