

# Abstracts

## High-speed ASK transceiver based on the NRD-guide technology at 60-GHz band

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*F. Kuroki, M. Sugioka, S. Matsukawa, K. Ikeda and T. Yoneyama. "High-speed ASK transceiver based on the NRD-guide technology at 60-GHz band." 1998 Transactions on Microwave Theory and Techniques 46.6 (Jun. 1998 [T-MTT]): 806-810.*

A new type of high-speed amplitude shift-keying (ASK) transceiver has been developed in an integrated manner at 60 GHz by using the nonradiative dielectric waveguide (NRD-guide) technology. An emphasis is placed on the high-speed performance of the newly developed ASK modulator. The modulator uses a Schottky barrier diode (SBD), which has higher switching speed than a p-i-n diode. In addition, the operation principle of it is different from that of the conventional p-i-n diode modulator. A pair of NRD-guide transceivers have been fabricated and 400-Mb/s data-transmission test has been carried out successfully by using them.

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