Abstracts

A Ka-band fully integrated transceiver multi-chip-module based on aluminum nitride multi-layer LCC package with the waveguide interface

M. Akaishi, T. Kaneko, N. Yakuwa, K. Wada and O. Myohga. "A Ka-band fully integrated transceiver multi-chip-module based on aluminum nitride multi-layer LCC package with the waveguide interface." 1999 MTT-S International Microwave Symposium Digest 99.2 (1999 Vol. II [MWSYM]): 471-474 vol.2.

A super miniaturized transceiver module whose size is 35 mm/spl times/35 mm/spl times/6 mm has been successfully developed for LMDS (Local Multipoint Distribution System). The module, which can be directly connected to an antenna consists of all active circuits and a frequency duplexer using the newly developed drop-in circulator. An AlN multilayer LCC package was employed in consideration of transmission loss and thermal management. The saturated output power of 23 dBm, the phase noise of 91 dBc/Hz@100 kHz off, and the receiver noise figure of 7.0 dB are obtained in 30 GHz band.

❑ Return to main document.

Click on title for a complete paper.