Abstracts

A +2.4/0 V controlled high power GaAs SPDT antenna switch IC for GSM application

K. Numata, Y. Takahashi, T. Maeda and H. Hida. "A +2.4/0 V controlled high power GaAs SPDT antenna switch IC for GSM application." 2002 Radio Frequency Integrated Circuits (RFIC) Symposium 02. (2002 [RFIC]): 141-144.

We have developed a high-power-handling and low-voltage-controlled GaAs single-pole dual-throw (SPDT) antenna switch for GSM application. The switch circuit configuration has a capacitor at the antenna terminal and two resistors between the transmitter (Tx) and receiver (Rx) terminals and the control terminals. This circuit enables the DC voltages of the Tx terminal and the Rx terminal to be separated from each other, resulting in a high-power-handling operation at a lower control voltage than that for the conventional switch. The developed SPDT switch demonstrated a handling power of 37.5 dBm and an insertion loss of 0.37 dB with a control voltage of +2.4/0 V.

❑ Return to main document.