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标题: Dependence of Output Power on Slot Antenna Width in Terahertz Oscillating Resonant Tunneling Diodes
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摘要: We report on the dependence of the output power on the slot antenna width in resonant tunneling diode (RTD) oscillators. The oscillators have different antenna widths of 4, 8, and 20 mu m and the same antenna length of 130 mu m. Although the experimentally observed oscillation frequencies were similar to 500 GHz and independent of the antenna width, maximized output powers of similar to 130 mu W were obtained at the antenna width of 8 mu m by the impedance matching between the RTD and the antenna.
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