

A compact subharmonically pumped MMIC self oscillating mixer for 77 GHz applications

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A novel 77 GHz MMIC self oscillating mixer is presented with measured results. The mixer achieves mixing and doubling simultaneously using a single pHEMT. The mixer exhibits a measured conversion loss of 12 dB at 77 GHz and an average measured conversion loss of 15 dB from 70 to 85 GHz which compares well with simulated results.

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