

Abstracts

Millimeter Wavelength Frequency Multipliers

J.W. Archer. "Millimeter Wavelength Frequency Multipliers." 1981 Transactions on Microwave Theory and Techniques 29.6 (Jun. 1981, Part I [T-MTT]): 552-557.

Mechanically tuneable millimeter wavelength frequency doublers typically exhibiting 10-percent conversion efficiency at any output frequency in the range 100-260 GHz have been fabricated. Output power varies from 10 mW at 100 GHz to 6 mW at 260 GHz, with a fixed tuned instantaneous 1-dB bandwidth typically 5 percent of the center frequency. A frequency tripler to 215-GHz output frequency is also described. For this device, a mechanically tuneable 3-dB bandwidth of 210 to 240 GHz was obtained, with a peak conversion efficiency of 6 percent at 4.8-mW output power.

[Return to main document.](#)