

# Abstracts

## Microwave regenerative dividers with low phase noise

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*E.S. Ferre-Pikal and F.L. Walls. "Microwave regenerative dividers with low phase noise." 1998 MTT-S International Microwave Symposium Digest 98.3 (1998 Vol. III [MWSYM]): 1447-1450.*

We demonstrate regenerative divide-by-two (halver) circuits with very low phase modulation (PM) noise at input frequencies of 18.4 GHz and 39.8 GHz. The PM noise of the 18.4 to 9.2 GHz divider pair was  $/\text{spl Lscr}/(10 \text{ Hz}) = -134 \text{ dB}$  below the carrier in a 1 Hz bandwidth (dBc/Hz) and  $/\text{spl Lscr}/(10 \text{ MHz}) = -166 \text{ dBc/Hz}$ , and the PM noise of the 39.8 GHz to 19.9 GHz divider pair was  $/\text{spl Lscr}/(10 \text{ Hz}) = -122 \text{ dBc/Hz}$  and  $/\text{spl Lscr}/(10 \text{ MHz}) = -167 \text{ dBc/Hz}$ .

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