

Abstracts

A Low Current, High Gain Monolithic Amplifier Covering 5-20 GHz Bandwidth

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A monolithic amplifier has been developed using a three-stage structure with feedback input/output stages and a reactively matched middle stage. The amplifier has exhibited greater than 12dB gain across 5-20 GHz bandwidth at a bias current of 40mA. The current to gain efficiency of 3.3mA/dB is the highest ever reported for a monolithic amplifier covering this bandwidth. The VSWR is less than 2.0:1 at input and less than 2.5:1 at output. The middle stage also provides a separate gain control with greater than 10dB dynamic range.

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