

# Abstracts

## X-Band Integrated Circuit Mixer with Reactively Terminated Image (Jul. 1968 [T-MTT])

---

*K.M. Johnson. "X-Band Integrated Circuit Mixer with Reactively Terminated Image (Jul. 1968 [T-MTT])." 1968 Transactions on Microwave Theory and Techniques 16.7 (Jul. 1968 [T-MTT] (Special Issue on Microwave Integrated Circuits)): 388-397.*

An X-band mixer using GaAs Schottky barrier diodes with a thin-film 500-MHz IF preamplifier was developed using hybrid microwave integrated circuit techniques. The balanced mixer had filters to provide a short circuit at the image frequency. The entire mixer preamplifier occupied an area of only 0.38 square inches and had a noise figure of 6.7 dB which corresponded quite closely to the theoretical noise figure considering all losses. The thin-film IF amplifier alone had a 2.2-dB noise figure and the mixer IF amplifier coupling network had a loss of 0.4 dB.

 [Return to main document.](#)