

# Abstracts

## A Compact 4-GHz Linearizer for Space Use (Dec. 1986 [T-MTT])

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*R. Inada, H. Ogawa, S. Kitazume and P. Desantis. "A Compact 4-GHz Linearizer for Space Use (Dec. 1986 [T-MTT])." 1986 Transactions on Microwave Theory and Techniques 34.12 (Dec. 1986 [T-MTT] (1986 Symposium Issue)): 1327-1332.*

A compact and lightweight 4-GHz linearizer for satellite TWTA's has been developed by using MIC packages with chip devices. The linearizer is composed of a preamplifier, a predistortion linearizer, and a limiting amplifier, consisting of two, three, and three 25x12.5-mm packages, respectively. It improves the noise power ratio for an FM system by 3 dB and the required C/N for a TDMA system by 4.5 dB compared with the conventional satellite TWTA. A space environmental test and an aging test were successfully performed on the equipment.

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