

# Abstracts

## Efficient Thin Film InSb/LiNbO<sub>3</sub>/ Convolver

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K. Yamanouchi, S. Mitsui and K. Shibayama. "Efficient Thin Film InSb/LiNbO<sub>3</sub>/ Convolver." 1980 MTT-S International Microwave Symposium Digest 80.1 (1980 [MWSYM]): 31-33.

A thin film InSb/LiNbO<sub>3</sub>/ acoustoelectric convolver has been successfully fabricated and operated at a center frequency of 100 MHz. The InSb is first deposited and then etched to the waveguide with the width of 1 mm. The Hall mobility and  $\sigma_h$  of the InSb with a thickness of about 500 Å are  $\mu_H = 1041 \text{ cm}^2/\text{V} \cdot \text{sec}$  and  $\sigma_h = 34.3 \text{ } \mu\text{S}$ , respectively. A convolution efficiency of -59 dBm was obtained experimentally.

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