

# Abstracts

## A High Speed Binary Pulse Regenerator in Microwave Frequencies

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*M. Sugiyama, Y. Matsuo and A. Saeki. "A High Speed Binary Pulse Regenerator in Microwave Frequencies." 1967 G-MTT International Microwave Symposium Program and Digest 67.1 (1967 [MWSYM]): 168-170.*

In a long-distance communication system by means of pulse code modulation, repeaters are set along the route of transmission in order to regenerate pulses which have been degraded by several types of distortion due to noise, bandwidth limitations and other effects. Recently, a bit rate of PCM shows a extending tendency to much higher, for the transmission of television, picturephone and other broadband signals. Therefore, functions of the pulse regenerator are required to handle higher bit rate signals for the previously mentioned uses. The methods of regeneration and the experiments described here are concerned with regenerating high speed PCM-AM pulses directly at 10.6 GHz, using a hysteresis characteristic and a locking oscillation characteristic of an Esaki-diode oscillatatar. Method of the regeneration

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