

# Abstracts

## **The GaAs MESFET as a Pulse Regenerator in the Gigabit per Second Range (Letters)**

---

*H. Beneking and W. Filensky. "The GaAs MESFET as a Pulse Regenerator in the Gigabit per Second Range (Letters)." 1976 Transactions on Microwave Theory and Techniques 24.6 (Jun. 1976 [T-MTT] (Special Issue on Microwave Field-Effect Transistors)): 385-386.*

Regeneration and amplification of fast pulses in the 50-IPS range have been established using GaAs MESFET's under switching conditions. Sharpening factors,  $t_{\text{sub r in}}/t_{\text{sub r out}}$ , of 3 and voltage amplification factors of 2 at 50 Omega have been achieved for output pulses up to 100 mA. The sharpening effect is caused mainly by the voltage-dependent gate capacitance which varies with the input pulse amplitude.

[Return to main document.](#)