Abstracts

Voltage-Tolerant Monolithic L-Band GaAs SPDT Switch

S.W. Cooper and G.A. Truitt. "Voltage-Tolerant Monolithic L-Band GaAs SPDT Switch." 1989 MTT-S International Microwave Symposium Digest 89.3 (1989 Vol. III [MWSYM]): 1113-1114.

A monolithic GaAs L-band single-pole double-throw nonreflective (SPDTNR) FET switch has been developed. The switch has shown to be significantly less sensitive to DC ripple when compared to conventional FET switches. Also, the switch has the advantage of operating with either positive or negative control voltages. Small-signal insertion loss is less than 1.3 dB over a 1 to 2 GHz bandwidth with less than 1.3:1 VSWR in all states. Isolation exceeds 35 dB, with a switching current requirement of less than 10 uA. The chip size is 0.97 mm x 1.75 mm x 0.15 mm which permits more than 2100 monolithic switches to be fabricated on a 3-inch GaAs wafer.

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