

Abstracts

Octave Bandwidth Adjustable SPDT Power Switch Using p-i-n Diode-Terminated Stubs (Correspondence)

H.-N. Toussaint and R. Hoffman. "Octave Bandwidth Adjustable SPDT Power Switch Using p-i-n Diode-Terminated Stubs (Correspondence)." 1971 Transactions on Microwave Theory and Techniques 19.7 (Jul. 1971 [T-MTT] (Special Issue on Microwave Integrated Circuits)): 657-659.

A new two-diode single-pole double-throw (SPDT) power-switch with the operating frequency adjustable within one octave is presented. An experimental model of the switch showed frequency adjustments in narrow bandwidth operation between 0.65 and 1.3 GHz. Frequency adjustment is made by appropriately short-circuiting a transmission line. Using thin-film microstrip lines, the switch was built on a 50-mil-thick 1-in by 1-in Al₂O₃/ceramic substrate. Switching speed is 100 to 300 ns; power handling capability is 1.5-kW peak power at 1-percent duty factor.

[Return to main document.](#)