Abstracts

High Power Pin Diode Limiting

P. Basken, K.E. Mortenson and N. Brown. "High Power Pin Diode Limiting." 1967 G-MTT International Microwave Symposium Program and Digest 67.1 (1967 [MWSYM]): 183-184.

Conventional high power diode limiters use a multiplicity of varactor diodes in various microwave circuit configurations. The higher power handling PIN diode is normally unsuitable as a passive limiter due to its slow speed of response. The I region thickness of this PIN ranges between one and five mils with a voltage breakdown range of 200 to 1000 volts. By reducing the I region thickness to less than 0.5 mils, a junction is achieved which will respond rapidly enough to limit effectively at frequencies up to the UHF range. The resulting reduction in junction breakdown voltage is not detrimental as the diode is in a low impedance state during application of high power.

❑ Return to main document.