Abstracts

X-Band Pulsed Solid State Transmitters

S.E. Hamilton, R.S. Robertson, F.A. Wilhelmi and M.E. Dick. "X-Band Pulsed Solid State Transmitters." 1980 MTT-S International Microwave Symposium Digest 80.1 (1980 [MWSYM]): 162-164.

This paper describes a pulsed X-band solid state transmitter capable of power levels greater than 135 watts peak and 45 watts average. Three separate transmitters were built, two used silicon double drift IMPATTs and the third used Gallium Arsenide single drift IMPATTs as the active RF elements. Hybridized constant current pulse modulators were used to bias the diodes. A comparison of the RF performance of the three transmitters is given. The transmitter is form factored for use in missile or airborne applications.

❑ Return to main document.