Abstracts

Class B Operation of Microwave FETs for Array Module Applications

M. Cohn, J.E. Degenford and R.G. Freitag. "Class B Operation of Microwave FETs for Array Module Applications." 1982 MTT-S International Microwave Symposium Digest 82.1 (1982 [MWSYM]): 169-171.

In addition to the well known class B advantages of high eta /sub PA/ and self turn on for pulsed operation, it is shown herein that class B FET amplifiers have several other important features including: 1) Significantly reduced power dissipation 2) A dynamic range of typically 8-10 dB over which gain is constant and power added efficiency is >30%. 3) Phase behavior (static and dynamic) is comparable to that observed with similar FETs operated class A. 4) Absence of erratic phase behavior during pulse turn-on and turn-off. These features make class B operation of power FET's very attractive for phased array module applications.

❑ Return to main document.