# Abstracts

## An S-band high-power broadband transmitter

*B.B. Baturov, A.V. Vinogradnyi, G.A. Koshevarov, L.Ya. Melnikov, A.N. Korolyev, P.M. Meleshkevich and V.I. Poognin. "An S-band high-power broadband transmitter." 2000 MTT-S International Microwave Symposium Digest 00.1 (2000 Vol. I [MWSYM]): 557-559.*

A high-power broadband transmitter (PTX) operating at the longer-wave part of the S-band is discussed. In the present paper principal attention is paid to the main PTX peculiarities due to which the PTX, operating in the LFM pulse mode has several unique features: high pulse (up to 800 kW) and average (up to 12 kW) power in an extremely wide (10%) frequency band with a high spectrum purity (the relative spectral density of amplitude-phase noise is below -100 dB/Hz at 100 Hz off the carrier, the relative level of regular components in the signal spectrum is below -70 dB). Several aspects, vital for the design of high-power broadband transmitters for radar systems, in particular the advantages of multiple-beam klystrons, are considered.

❑ Return to main document.