

Session LL:

Focused Session on Active Quasi-Optical Techniques

Chairman: James W. Mink

U. S. Army Research Office
Research Triangle Park, NC

This session will discuss techniques to incorporate active semi-conductor devices with quasi-optical structures to obtain significant power at millimeter and sub-millimeter wavelengths. Semiconductor devices have limited power handling capabilities at high frequencies, and with increasing frequency the output decreases rapidly. Techniques based on quasi-optical structures, to combine the output of many solid state devices will be presented. The method has been applied to a number of solid state devices including non-linear elements for harmonic power combining and Gunn diode and MESFETs for fundamental frequency combining.

1:30 p.m.–3:00 p.m., Thursday, May 10, 1990
West Ballroom C