Abstracts

Broadband Millimetric Semiconductor Junction Circulators at 77K

R. Sloan, C.K. Yong and L.E. Davis. "Broadband Millimetric Semiconductor Junction Circulators at 77K." 1996 MTT-S International Microwave Symposium Digest 96.1 (1996 Vol. I [MWSYM]): 109-112.

Broadband circulation at millimetric frequencies is currently unavailable. However on utilising the gyrotropic behaviour of the magnetised semiconductor this appears possible. Low-loss theoretical results are presented which suggest GaAs and InSb circulators are feasible with bandwidths greater than an octave and operating up to 125 GHz at a temperature of 77K.

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