

Abstracts

Design, Analysis and Application of High Performance Permanently Magnetised, Quasi-Optical, Faraday Rotators

G.M. Smith, C.P. Unsworth, M.R. Webb and J.C.G. Lesurf. "Design, Analysis and Application of High Performance Permanently Magnetised, Quasi-Optical, Faraday Rotators." 1994 MTT-S International Microwave Symposium Digest 94.1 (1994 Vol. I [MWSYM]): 293-296.

The design, analysis, characterisation, manufacture and application of new, large area, permanently magnetised quasi-optical Faraday rotators is discussed. As isolators, these have given state of the art performance at W-band with isolations $\sim 60\text{dB}$ and insertion loss $\sim 0.35\text{dB}$, at spot frequencies. It is believed that the wideband performance of these isolators is primarily limited by the matching of the ferrite to free space.

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