Abstracts

X Band Integrated Diode Phase Shifters

R.G. Stewart and M.N. Giuliano. "X Band Integrated Diode Phase Shifters." 1968 G-MTT International Microwave Symposium Digest and Technical Program 68.1 (1968 [MWSYM]): 147-154.

Recent advances in solid state microwave technology have made possible the fabrication of diode phase shifters in hybrid integrated circuit form. However, work at X band has been hindered by the limited isolation presently available with diodes at this frequency. Actually, accurate phase shifters can still be built if one accounts for this limited isolation in the design and analysis of the systems. This paper outlines this analysis and applies it in the design of low insertion loss phase shifters for wideband operation around 9 GHz. Surface oriented P/sup +/IN/sup +/ diodes are used in these switched line length systems to obtain phase shifts of up to 360°.

❑ Return to main document.