Abstracts

Optimal 3-Port Power Dividers Derived from Hybrid-T Prototypes

S. David and W.K. Kahn. "Optimal 3-Port Power Dividers Derived from Hybrid-T Prototypes." 1967 G-MTT International Microwave Symposium Program and Digest 67.1 (1967 [MWSYM]): 54-57.

This paper deals with 3-port power dividers which are optimal in the sense of excellent impedance match at all ports, low insertion loss in the normal mode of operation, and high isolation between the output ports. These optimal 3-port characteristics are in large measure common to those of 4-port hybrid-T junctions with a terminated sum or difference port; furthermore, the design of these optimal 3-ports may be derived from corresponding terminated hybrid-T prototypes. Their major advantages over the latter reside in relative compactness and/or simplicity of structure. The discussion here emphasizes a unified approach applicable to the design of a whole class of junctions; in fact, three such power dividers were designed, constructed, and tested.

❑ Return to main document.