

# Abstracts

## A 3-dB Interdigitated Coupler on Fused Silica

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*W.H. Childs and P.A. Carlton. "A 3-dB Interdigitated Coupler on Fused Silica." 1977 MTT-S International Microwave Symposium Digest 77.1 (1977 [MWSYM]): 370-372.*

This paper presents a simple model that describes the odd/even impedances and phase velocities of an inter-digitated structure. Complete design information is given for a 3-dB interdigitated coupler on fused silica. Experimental data are presented for a coupler centered at 10 GHz and another at 13.5 GHz. The coupler features extremely low dissipative loss (of the order of 0.1 dB) and an excellent power split (within 0.3 dB over a 25- to 30-percent bandwidth).

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