

# Abstracts

## Ka-Band Slot-Fed Higher Order-Mode Low-Loss Fabry-Perot Filters (Short Papers)

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*J. McCleary, M.-y. Li and K. Chang. "Ka-Band Slot-Fed Higher Order-Mode Low-Loss Fabry-Perot Filters (Short Papers)." 1994 Transactions on Microwave Theory and Techniques 42.7 (Jul. 1994, Part II [T-MTT] (Special Issue on Filters and Multiplexers)): 1423-1426.*

Low-loss bandpass filters consisting of Fabry-Perot resonators excited by slots which couple to higher order resonator modes are demonstrated. For close reflector spacings, the slots efficiently couple power from rectangular waveguide to the TEM<sub>sub 400</sub>/ and TEM<sub>sub 300</sub>/ modes of the resonator. At Ka-band the filters have insertion losses less than 1 dB in general and less than 0.5 dB in some cases. The unloaded Q values of the filters range from 1500 to 3000. The filters are mechanically tunable over a 25% bandwidth.

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