Abstracts

Modes and Attenuation Constants in Circular Hollow Waveguides with Small Core Diameters for the Infrared

Y. Kato and M. Miyagi. "Modes and Attenuation Constants in Circular Hollow Waveguides with Small Core Diameters for the Infrared." 1992 Transactions on Microwave Theory and Techniques 40.4 (Apr. 1992 [T-MTT]): 679-685.

The mode structures and attenuation constants in circular hollow waveguides are evaluated numerically based on the exact characteristic equations. Mode properties, which are strongly dependent on waveguide materials, and attenuation constants are discussed when the core diameter becomes small. Special modes are also analyzed in oversized metallic wave-guides which approach very familiar modes in perfect-conducting cylindrical waveguides when the core diameter becomes small.

❑ Return to main document.