

Abstracts

Powder Core Dielectric Waveguides

W.M. Bruno and W.B. Bridges. "Powder Core Dielectric Waveguides." 1984 MTT-S International Microwave Symposium Digest 84.1 (1984 [MWSYM]): 497-498.

A powder-filled surface of a led groove in the teflon substrate has been demonstrated as a dielectric waveguide at 94 GHz. Guide wavelengths measured for combinations of guide dimensions and powders agree within 10% of values predicted by Marcatili 's approximate theory. Attenuation constants of 0.2 to 0.3 dB/cm were measured for barium tetra-titanate.

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