

# Abstracts

## A Stepped Mode Transducer Using Homogeneous Waveguides (Correspondence)

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*D.A. Bathker. "A Stepped Mode Transducer Using Homogeneous Waveguides (Correspondence)." 1967 Transactions on Microwave Theory and Techniques 15.2 (Feb. 1967 [T-MTT]): 128-130.*

A rectangular to cylindrical waveguide transducer is described which couples the dominant rectangular (TE<sub>sub 10/</sub>) and dominant cylindrical (TE<sub>sub 11/°</sub>) modes. The maximum age reflection coefficient remains less than 0.025 over the design bandwidth. Symmetry considerations substantiated by moding tests show the transducer to be higher-order mode free. Previous work is reviewed, the design method discussed, and experimental data shown.

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