IRE STANDARDS ON ANTENNAS AND WAVEGUIDES: DEFINITIONS FOR WAVEGUIDE COMPONENTS, 1955

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IRE Standards on Antennas and Waveguides: Definitions for Waveguide Components, 1955*

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INTRODUCTION

A set of definitions of basic waveguide terms prepared by the Technical Committee on Antennas and Waveguides was published as IRE Standards in December, 1953 (53 IRE 2. S1). The present Standards on Waveguide Components, Definitions of Terms, represent an extension of the work of this committee from 1953 to 1955.

Waveguide component terms have not previously been standardized by the IRE; however, with continuing development in this field the need for such definitions has become increasingly apparent. The present list comprises only the more general, basic and established terms. For example, *Waveguide Transformer* is defined but the many specific types of waveguide transformer such as *Double Stub Transformer*, *Quarter-Wave Sleeve Transformer*, *Probe Transformer*, *Eccentric Line Transformer*, and others are not defined.

As used in the following definitions, *Waveguide* is a generic term which includes *transmission line* and *uniconductor waveguides* as special cases. For specific definitions see 53 IRE 2. S1.

DEFINITIONS

Attenuator, Waveguide. A waveguide device for the purpose of producing attenuation by any means, including absorption and reflection.

Bend, Waveguide. A section of waveguide in which the direction of the longitudinal axis is changed.

Butt Joint. A connection between two waveguides which provides physical contact between the ends of the waveguides in order to maintain electrical continuity.

Cavity Resonator (in Waveguides). A resonator formed by a volume of dielectric bounded by reflecting walls.

Cavity Resonator Frequency Meter. A cavity resonator used to determine frequency of an electromagnetic wave.

* Reprints of this Standard, 55 IRE 2.S1, may be purchased while available from The Institute of Radio Engineers, 1 East 79 Street, New York 21, N. Y., at $0.25 per copy. A 20 per cent discount will be allowed for 100 or more copies mailed to one address.

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