# Abstracts

## Reflection Coefficient of Unequal Displaced Rectangular Waveguides (Letters)

*R. Levy. "Reflection Coefficient of Unequal Displaced Rectangular Waveguides (Letters)." 1976 Transactions on Microwave Theory and Techniques 24.7 (Jul. 1976 [T-MTT]): 480-483.*

The IEC has suggested that maximum allowable displacements of waveguide flanges should not cause the inherent return loss due to waveguide tolerances to degrade more than 1 dB. Calculations on displaced unequal waveguides at their extreme tolerances show that this leads to a maximum allowable displacement of 0.0175 of the broad (= a) dimension for a waveguide tolerance of ±a/500. The worst return loss under these conditions is approximately -41dB. However, it is suggested that this maximum allowable displacement is based on a statistically remote worse case condition, and relaxation to a value of 0.021a would be more realistic.

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