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Microwave circuits-Measuring methods for limiter

微波电路 限幅器测试方法

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Foreword

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Microwave Circuit Limiter Test Method

1 Scope

This document describes the test methods for the main electrical parameters of microwave circuit limiters.

This document applies to microwave circuit limiters, including passive limiters, semi-active limiters, active limiters, etc.

2 Normative references

GB/T 17573-1998

IEC 747

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Insertion loss

Li The ratio of input power to output power when the limiter is working with small signals.

3.2 ΔL_i

The difference between the maximum and minimum insertion loss within the operating frequency band when the limiter is working with a small signal.

3.3 VSWR

On a uniform lossless transmission line, the ratio of the maximum voltage amplitude to the minimum voltage amplitude.

The voltage standing wave ratio $VSWR_i$ at the output end is the output voltage standing

wave ratio VSWRo.

3.4 Plim

The maximum output power of the limiter within the specified input power range.

3.5 spikeleakagepower

Under pulse working conditions, the maximum output power generated at the moment when a high-power signal is input to the limiter.