



VDI USER GUIDE

Product: VDI WR1.9x5
Block Serial Number(s): VDI-WR1.9x5-S009
Virginia Diodes Inc., (434) 297-3257
021706-06comp11-Caltech-WR1.9x5-1
4/6/06

Section 1 User Guide Overview

The customer must read the entire User Guide prior to handling, testing, biasing, or using this product. This document gives a general description of the product, several important warnings to be considered when using the product, and basic operating instructions. This VDI product is a VDI WR1.9x5 Quintupler.

Warning- Read the entire VDI User guide for this product prior to operation.

Warning - This product can be permanently damaged by ElectroStatic Discharge (ESD). It is recommended that engineers and technicians wear a special grounded wrist strap when handling this component. In addition, the work environment around the component should be well grounded.

Warning - Opening the blocks, parts, or components will damage the internal components. VDI is not responsible for the warranty or guaranty of products damaged as a result of improper handling, testing, biasing, or use by customer.

Caution- VDI assumes the customer is familiar with microwave, millimeter wave, and VDI products. The user and customer are expected to understand all safety guidelines, health hazards, and general advisories that may exist and are associated with the use of this device. VDI is not responsible for any human hazards that may exist or may occur while using this device.

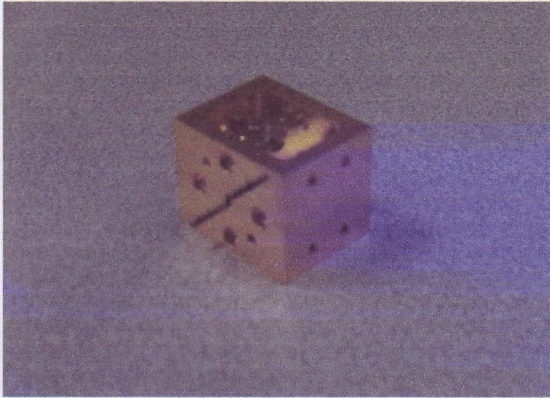


Figure 1 Photograph of the product is shown.



Figure 2 Diagram of the product is shown.

Section 2 General Operating Procedures and Guidelines

VDI assumes the customer is familiar with VDI products, and VDI is not responsible for the warranty or guaranty of products damaged as a result of improper handling, testing, biasing, or use by customer. VDI offers the following general guidelines for using these products and recommends the customer contact VDI at (434) 297-3257 for assistance if needed. The following procedures are a quick guide for turning on and off the product. In each case the individual steps must be followed in the proper sequence to avoid damaging critical components.

Warning-RF drive limitations, voltage bias limitations, and current limitations may exist for this device and are described below. Exceeding these limitations and guidelines may cause permanent damage to the device.

The drive and bias guidelines, limitations, and recommendations for this product are:

- Maximum RF input power is 35mW; typical operating range is 10-25 mW RF input power.
- The VDI WR1.9x5 does not require bias.

Contact VDI with questions or concerns regarding the product RF drive limitations, voltage bias limitations, and current limitations.

The Following procedure is to be used **when turning- on the device.**

Step A: The User and Test Bench must be properly grounded and protected against ESD.

Step B: Turn off the RF input power.

Step C: Connect the WR1.9x5 to the User system.

Step D: Increase the RF input power to the device (< 35 mW) and monitor the output power.

The Following procedure is to be used **when turning- off the device.**

Step A: The User and Test Bench must be properly grounded and protected against ESD.

Step B: Turn off the RF input power.

Step D: After completing turn-off procedures described above, it is now safe to turn off any other equipment on the Test Bench.

Section 3 Product Performance and Guidelines

The product performance is shown below.

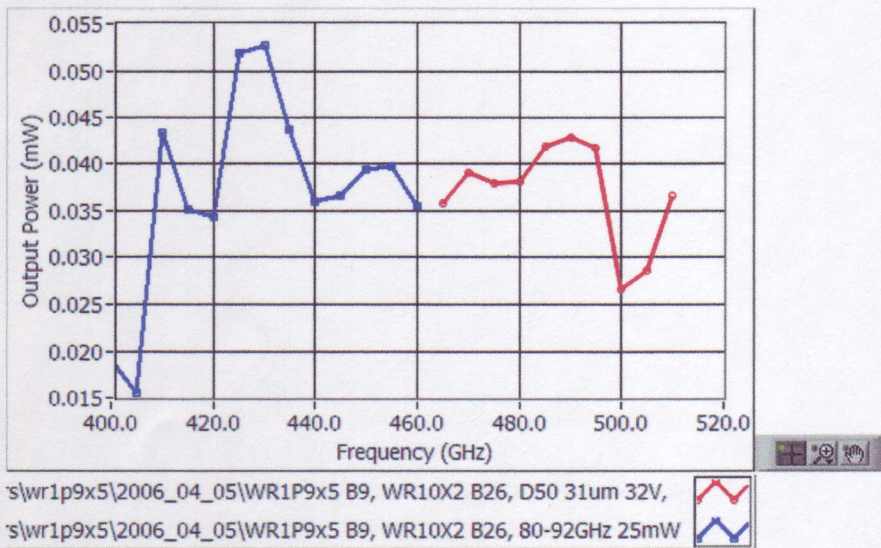


Figure 3 The product performance is shown. The RF output power verses output frequency is shown for 25mW input power.

Section 4 End of Document

VDI is not responsible for the warranty or guaranty of products damaged as a result of improper handling, testing, biasing, or use by customer.