

Keysight Technologies

TC421 Detector Sensitivity Measurements

Technical Overview

Description

Detector sensitivity measurements are presented on the TC421 GaAs Schottky diode. The diode was installed in a 50 GHz diode detector housing (the housing used 2.4 mm connectors and is the same housing used for Keysight Technologies, Inc. Coaxial Detector 33330E). This diode features large bond pads suitable for “flip chip” mounting. The diode was “flip chip” mounted using electrically conductive epoxy. A schematic diagram of the measurement circuit is shown below. 28 GHz zero bias and 20 microamp biased measurements are presented. The offset voltage with RFOFF is subtracted from the measurements. Additional data may be available through WPTC Marketing at 707-577-4482.

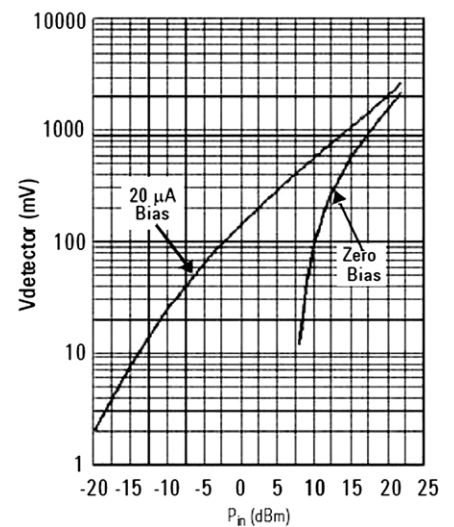


Figure 1. 28 GHz detector sensitivity

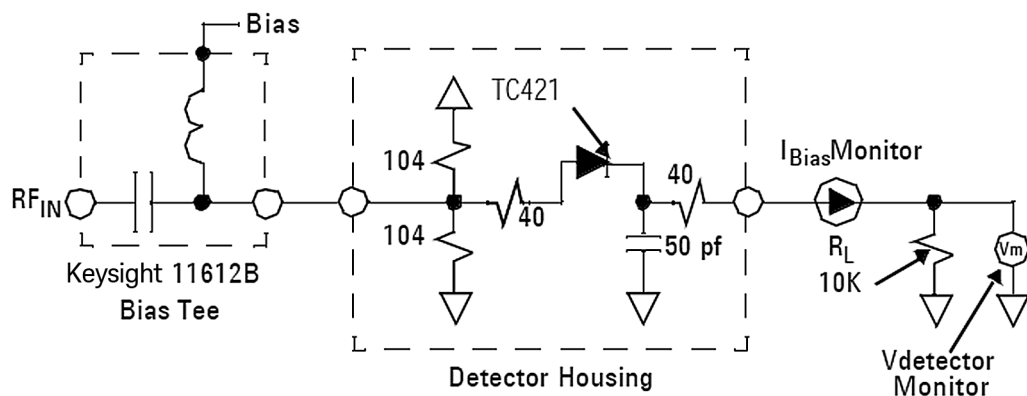


Figure 2. Detector Measurement Schematic

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