The TC611 was installed into a 2.4 mm, 50 GHz diode detector housing (the same housing used for Keysight Technologies, Inc. Coaxial Detector 33330E). Detector voltage measurements were made using the internal 50 pf bypass capacitor and an external 10 KW load resistor. A 50 ohms resistor near the diode terminates the RF in.

This product note presents sensitivity measurements as $V_{\text{detector}}$ millivolts vs. RF in (dBm) at 10 GHz and 30 GHz. From these measurements the deviation from linearity is calculated and plotted referenced to –40 dBm.

Figure 1. Deviation from linearity (dB)

Figure 2. Detector sensitivity 10 GHz & 30 GHz

Note: This technical overview provides supplemental information not included in the product data sheet. The purpose of supplemental data is to provide the end user with useful product-specific information to aid in the design process. The information provided does not represent or imply additional product specifications. Every attempt has been made to provide accurate data on typical products.