

## Broadband Detector, Model DQ-2

### Description:

Spacek Labs Model DQ-2 is a full-band, 33-50 GHz detector. This detector is a very cost effective way of measuring power in the Q-band spectrum. The RF input is WR-22 (UG383/U) and the output is SMA (F). These detectors can be used as fast data rate receivers, with up to 3 GHz bandwidth at the 3 dB point into a 50 Ohm load. Using a 10 megohm load the sensitivity is 2600 mV/mW at -20 dBm input power. Flatness across the band is  $\pm 2$  dB with a typical tangential sensitivity of -45 dBm in a 1 MHz video bandwidth. Maximum input power is +18 dBm. This detector is available with positive (P) or negative (N) output polarity.

### Features:

- Extremely rugged and compact
- Available in waveguide bandwidths from 18 to 110 GHz
- Our detectors can be made to extend frequency counters (up to 110 GHz)

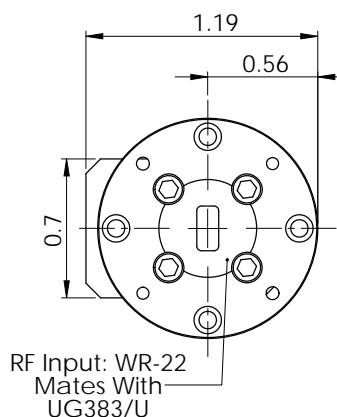
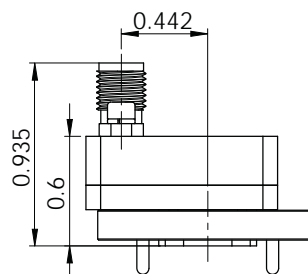
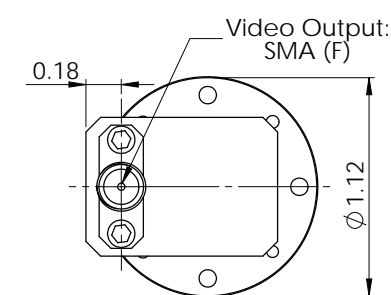
### Electrical Specifications:

Description	Min.	Typ.	Max.
Frequency (GHz)	33 GHz	-	50 GHz
Sensitivity (mV/mW)*	-	2600	-
Flatness (dB)	-	$\pm 2$ dB	-
Max Input Power (dBm)	-	-	18 dBm

\* @ -20 dBm input power

### Mechanical Specifications:

Description	Specification
Connector, Input	WR-22, UG383/U
Connector, Output	SMA (F)
Dimensions OA	See outline
Material	Brass
Finish	Gold
Weight	2.0 oz



**OUTLINE: DIMENSIONS IN INCHES (NOT TO SCALE)**

BROADBAND DETECTORS

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Notes: Product data is periodically updated to reflect product / raw material / process / testing changes. This data should not be used as guaranteed specifications. Please contact Spacek Labs to make sure you have the most current data.