

## DM313: Microwave Detector

### General description

DM313 is a general-purpose zero-bias Schottky diode microwave coaxial detector with SMA-connector intended for 5.8 GHz industrial applications.

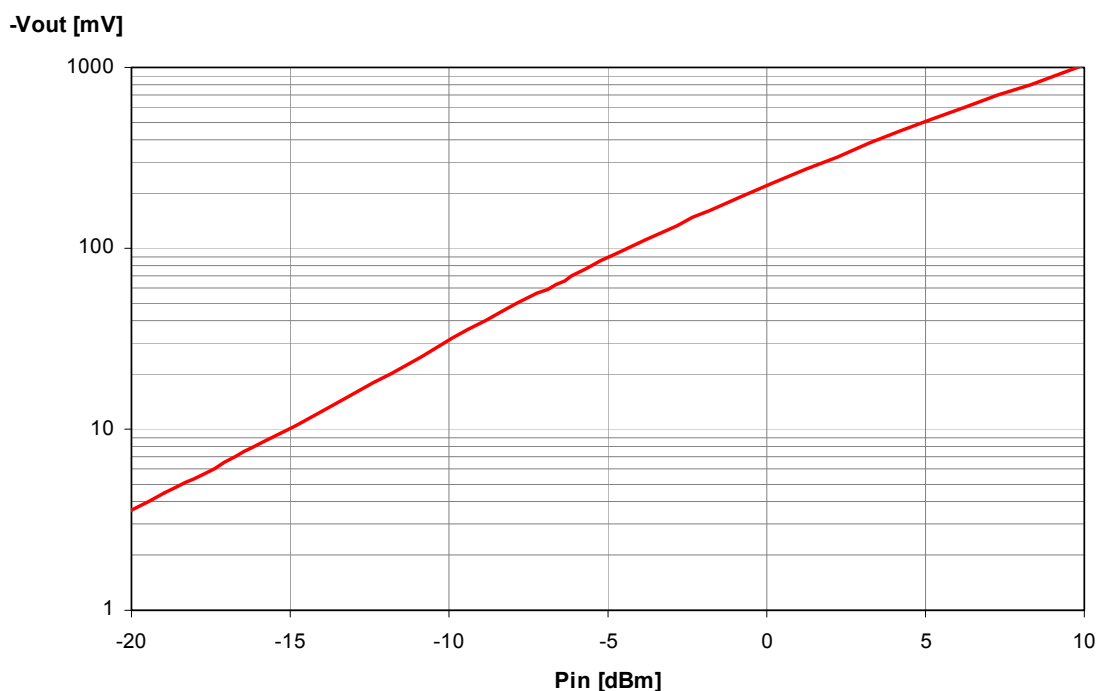
The detector delivers well-scaled DC voltage as a function of incident microwave power.



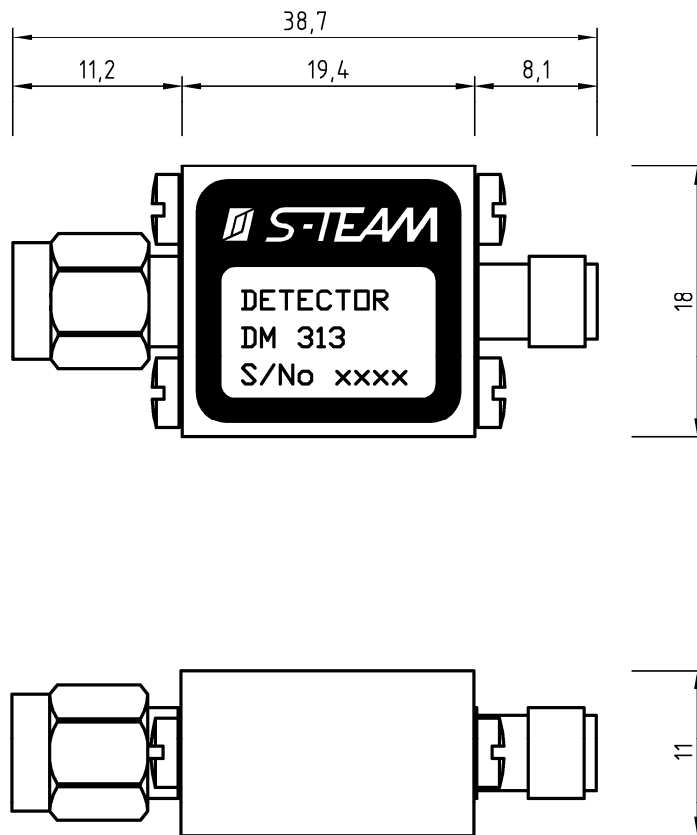
### Specifications

Frequency range	5.5 ÷ 6.1 GHz
Output voltage ( $P_{IN} = 1 \text{ mW}$ , $R_{LOAD} = 33 \text{ k}\Omega$ )	220 mV typ
Frequency response variation	$\pm 0.5 \text{ dB max}$
Statistical spread of output voltage	$\pm 1 \text{ dB (3-}\sigma \text{ deviation)}$
Output voltage temperature variation (5 to 65 °C)	< 3 dB
Output voltage polarity	Negative
Maximum input working power	10 mW
Max input power (destruction limit)	100 mW
VSWR	1.3 typ, 2 max
Video resistance	8 k $\Omega$ typ
Input connector	SMA-M
DC output connector	SMA-F
Dimensions in mm (L x W x H)	38.7 x 18 x 11

**Typical transfer characteristic** ( $f = 5.8 \text{ GHz}$ ,  $R_{LOAD} = 33 \text{ k}\Omega$ ,  $T_A = 25 \text{ }^\circ\text{C}$ )



Dimensional drawing (all dimensions in millimeters)



Actual size

