

# ESS0112A3 Biased Schottky Diode Detector

SMA-F/SMA-M Negative Output Polarity

0.1 to 12.4 GHz Broadband



## Technical Characteristics

### Product Features

High Dynamic Range @100 uA typ. bias
Flat Frequency Response
Ultra Wideband and Ultra fast
Low Video Output Resistance (350 ohms typ.)
Negative Polarity is Standard
High Reliability Hermetically Sealed Coax
RoHS Compliant

### Max. Ratings

Storage Temperature:	-65°C to +125°C
Operating Temperature:	-55°C to +90°C
Maximum input power:	100mW

## Product Export Classification

ECCN: EAR99 (Unless otherwise specified)

HTS: 8542330000

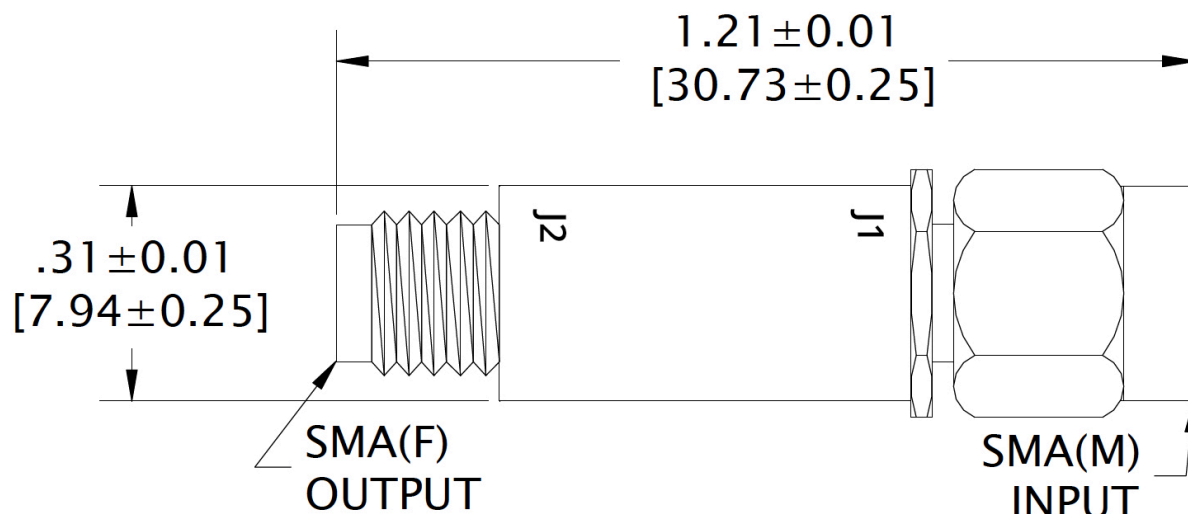
## Electrical Specifications

Parameters	Freq. (GHz)	Min.	Typical	Max.	Units
Voltage Sensitivity	.01 to 12.0 GHz		1800		mV/mW
Bias			100		μA
Tangential Sensitivity (Note 1)	.01 to 12.0 GHz		-52		dBm
Flatness	.01 to 12.0 GHz		0.5		+/-dB
Video Capacitance			470		pF
CW Power Handling				200	mWatts
Operating Temperature		-55		125	°C

## NOTES:

1. TSS is measured with a 2 MHz video bandwidth and 2dB NF amplifier.
2. Typical values are measured at +25°C and are not guaranteed.
3. At -20dBm input power.

## Outline Drawing



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## Performance Curve

Bias Schottky Detector, ESS SERIES – Typical Voltage Output Response

### TRANSFER CHARACTERISTIC

