

ESS6018A3 Biased Schottky Diode Detector

SMA-F/SMA-M Negative Output Polarity

6.0 to 18.0 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

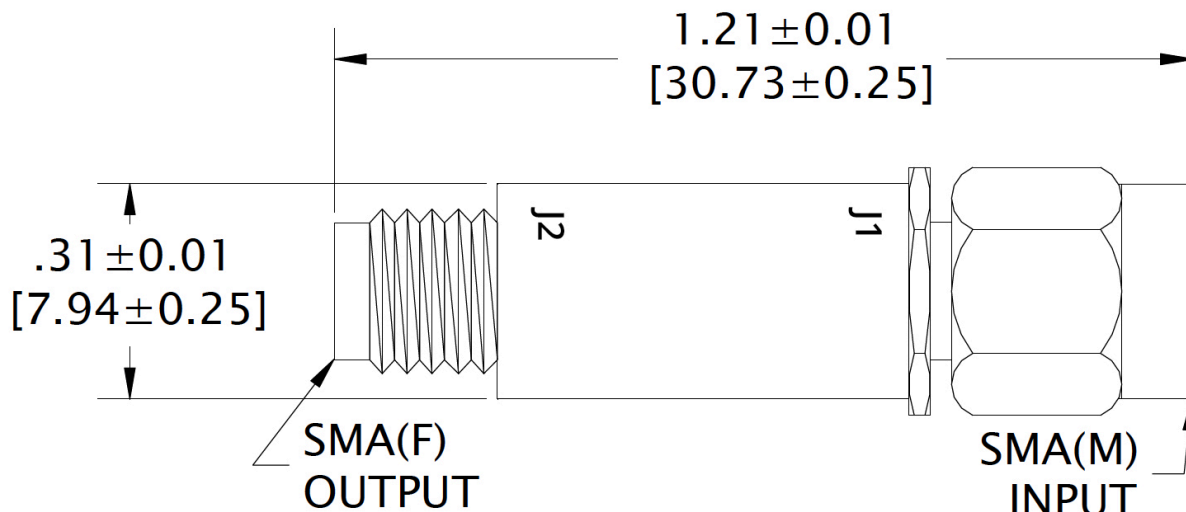
Electrical Specifications

Parameters	Freq. (GHz)	Min.	Typical	Max.	Units
Voltage Sensitivity	6.0 to 18.0 GHz		1600		mV/mW
Bias			100		μA
Tangential Sensitivity (Note 1)	6.0 to 18.0 GHz		-52		dBm
Flatness	6.0 to 18.0 GHz		0.8		+/-dB
Video Capacitance			10		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

