

ESS8012A3 Biased Schottky Diode Detector

SMA-F/SMA-M Negative Output Polarity
8.0 to 12.0 GHz Octave Band



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

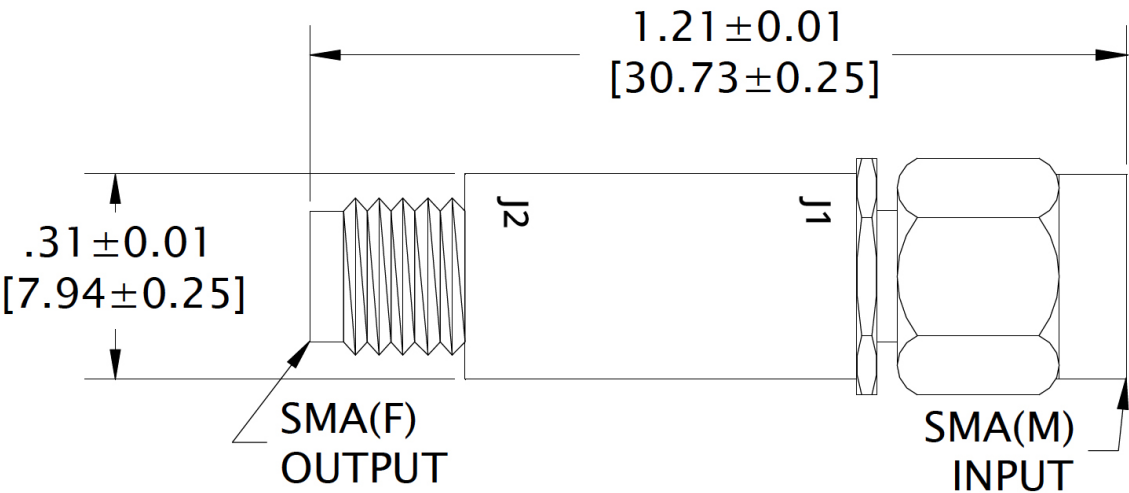
Max. Ratings	
Storage Temperature:	-65°C to +125°C
Operating Temperature:	-55°C to +90°C
Maximum input power:	200mW

Electrical Specifications

Parameters	Freq. (GHz)	Min.	Typical	Max.	Units
Voltage Sensitivity	8.0 to 12.0 GHz		1800		mV/mW
Bias			100		µA
Tangential Sensitivity (Note 1)	8.0 to 12.0 GHz		-52		dBm
Flatness	8.0 to 12.0 GHz		0.25		+/-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.
 4. Add "P" to model for positive polarity, ex. ESS8012PA3

Outline Drawing



Product Export Classification
ECCN: EAR 99 (unless
otherwise specified)
HTS: 8541.10.0060



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Performance Curve

Bias Schottky Detector, ESS SERIES – Typical Voltage Output Response

TRANSFER CHARACTERISTIC

