



ACSP-2501

BIASED COAXIAL SCHOTTKY DETECTOR

Frequency Range (min)	0.5 – 2	GHz
Sensitivity (min)	2000	mV/mW
Flatness vs. Frequency (max)	0.3	±dB
Typical TSS	-53	dBm
Nominal Video Capacitance	75	pF

NOTES:

Maximum input power: +20dBm

Sensitivity is measured into an open circuit load (>10k ohm).

VSWR is measured at or below -20dBm input power level.

Video capacitance is used for RF bypass. This value can be changed if required for video response time. Contact the factory for more information. Standard bias is 100uA.

This part number is also available with a zero bias schottky diode.

Due to higher impedance, the zero bias schottky will exhibit less sensitive TSS (typically a 3dB reduction)

The temperature performance of the zero bias schottky is poor when operating at low input power levels.

ENVIRONMENTAL SPECIFICATIONS:

MIL-E-5400, MIL-STD-202, MIL-E-16400

Operating Temp: -55°C to +125°C

Storage Temp: -65°C to +150°C

Humidity: MIL-STD-202F, M103, Cond B

Shock: MIL-STD-202F, M213, Cond B

Altitude: MIL-STD-202F, M105, Cond B

Vibration : MIL-STD-202F, M204, Cond B

Thermal Shock: MIL-STD-202F, M107, Cond A

Temperature Cycle: MIL-STD-202F, M105C, Cond D

SCREENING:

Internal Visual per MIL-STD-883, Method 2017

Temperature Cycle: -65°C to +100°C, 10 cycles

OPTIONAL HIGH-REL SCREENING (Ref MIL-PRF-38534):

Stabilization Bake per MIL-STD-883, Method 1008

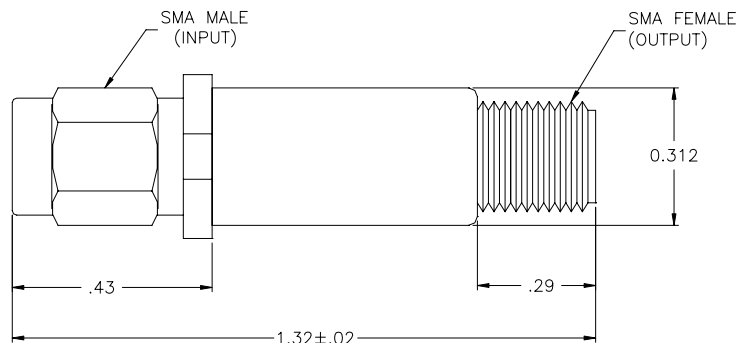
Temperature Cycle per MIL-STD-883, Method 1010

Constant Acceleration per MIL-STD-883, Method 2001

Burn-in per MIL-STD-883, Method 1015

Leak Test per MIL-STD-883, Method 1014

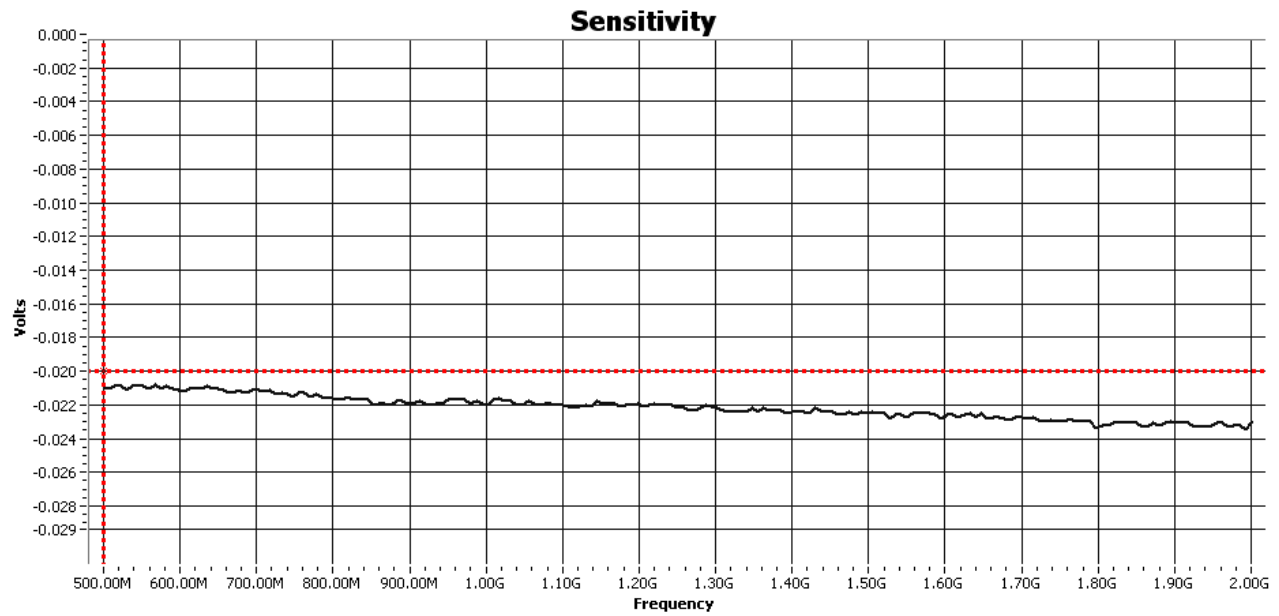
External Visual per MIL-STD-883, Method 2009



STANDARD CASE STYLE C3 (Optional Case Styles – C8, C15)

PART NUMBER ORDERING INFORMATION:

- Add desired polarity suffix: "N" for Negative, "P" for Positive (Ex: ACSP-2501N)
- Add "Z" for zero biased schottky option (Ex: ACSP-2501NZ)
- Add desired case style suffix: "C3" (Ex: ACSP-2501N3C3)
- Add "R" suffix: Reverse Connector Configuration (Ex: ACSP-2501N3C3R) (SMA Female Input/SMA Male Output)
- Add "-RC" suffix: RoHS-compliant (Ex: ACSP-2501N3C3R-RC)



Flatness = $\pm 0.265\text{dB}$

Flatness