



# ACSP-2507

## BIASED COAXIAL SCHOTTKY DETECTOR

<b>Frequency Range (min)</b>	2 – 12	GHz
<b>Sensitivity (min)</b>	2000	mV/mW
<b>Flatness vs. Frequency (max)</b>	1.1	±dB
<b>Typical TSS</b>	-53	dBm
<b>Nominal Video Capacitance</b>	12	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:**

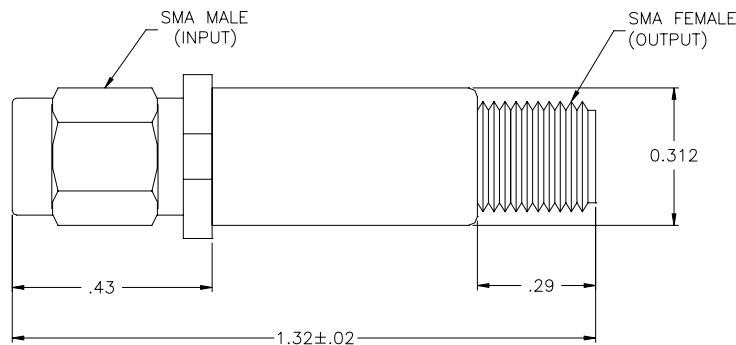
MIL-E-5400, MIL-STD-202, MIL-E-16400  
 Operating Temp: -55°C to +125°C  
 Storage Temp: -65°C to +150°C  
 Humidity: MIL-STD-202F, M103, Cond B  
 Shock: MIL-STD-202F, M213, Cond B  
 Altitude: MIL-STD-202F, M105, Cond B  
 Vibration : MIL-STD-202F, M204, Cond B  
 Thermal Shock: MIL-STD-202F, M107, 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):**

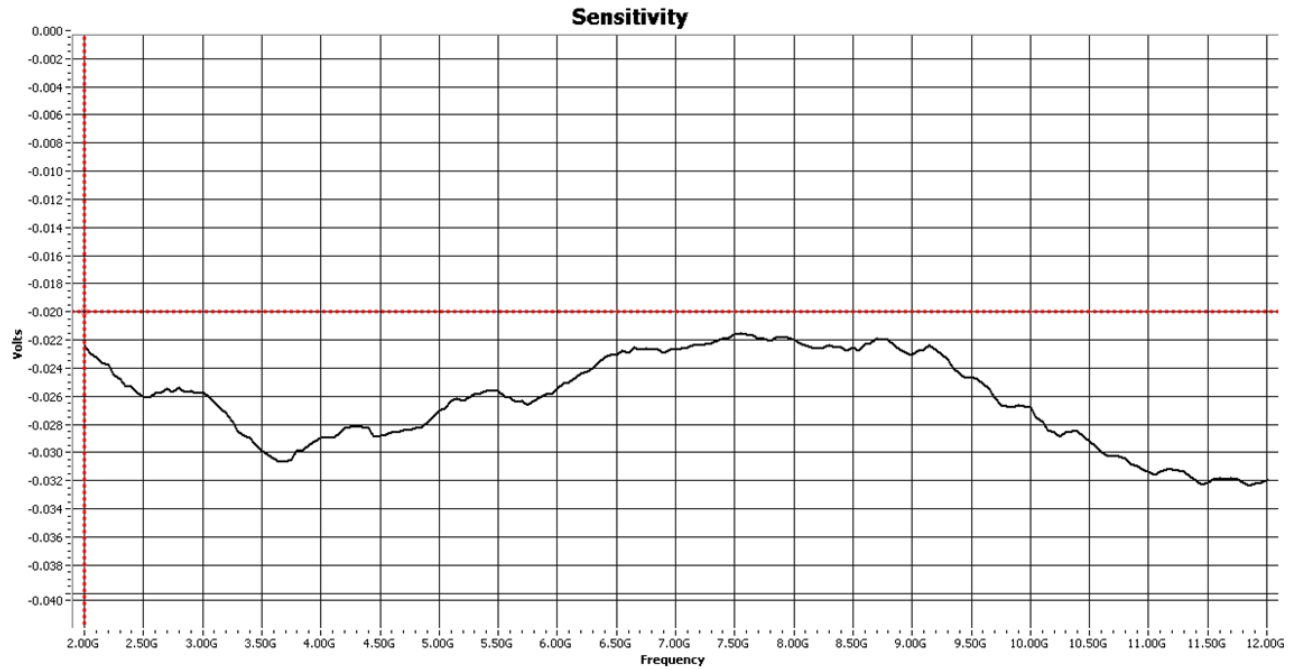
Stabilization Bake per MIL-STD-883, Method 1008  
 Temperature Cycle per MIL-STD-883, Method 1010  
 Constant Acceleration per MIL-STD-883, Method 2001  
 Burn-in per MIL-STD-883, Method 1015  
 Leak Test per MIL-STD-883, Method 1014  
 External Visual per MIL-STD-883, Method 2009



**STANDARD CASE STYLE C3**  
**(Optional Case Styles – C8, C15, C32)**

**PART NUMBER ORDERING INFORMATION:**

- Add desired polarity suffix: "N" for Negative, "P" for Positive (Ex: ACSP-2507N)
- Add "Z" for zero biased schottky option (Ex: ACSP-2507NZ)
- Add desired case style suffix: "C3" (Ex: ACSP-2507N3C3)
- Add "R" suffix: Reverse Connector Configuration (Ex: ACSP-2507N3C3R) (SMA Female Input/SMA Male Output)
- Add "-RC" suffix: RoHS-compliant (Ex: ACSP-2507N3C3R-RC)



Flatness =  $\pm 0.891\text{dB}$

**Flatness**