Advanced Control Components Inc.

ACSP-2503
BIASED COAXIAL SCHOTTKY DETECTOR

Frequency Range (min)	4 – 8	GHz
Sensitivity (min)	2000	mV/mW
Flatness vs. Frequency (max)	0.3	±dB
Typical TSS	-53	dBm
Nominal Video Capacitance	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):
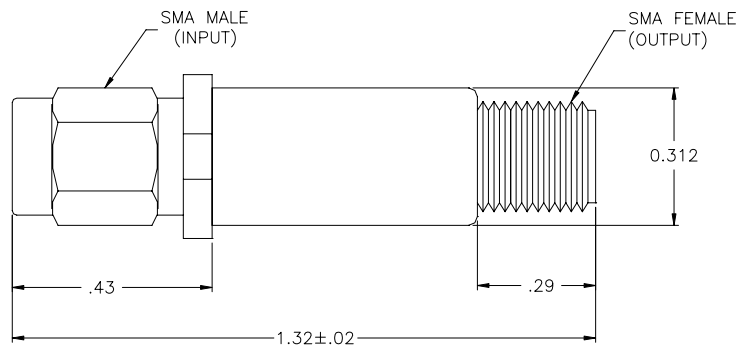Stabilization Bake per MIL-STD-883, Method 1008
Temperature Cycle per MIL-STD-883, Method 1010
Constant Acceleration per MIL-STD-883, Method 2001
Burn-in per MIL-STD-883, Method 1015
Leak Test per MIL-STD-883, Method 1014
External Visual per MIL-STD-883, Method 2009

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-2503N)
- Add "Z" for zero biased schottky option (Ex: ACSP-2503NZ)
- Add desired case style suffix: "C3" (Ex: ACSP-2503NZC3)
- Add "R" suffix: Reverse Connector Configuration (Ex: ACSP-2503NZC3R) (SMA Female Input/SMA Male Output)
- Add "-RC" suffix: RoHS-compliant (Ex: ACSP-2503NZC3R-RC)

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