

ACSP-2759

Biased Coaxial Schottky Detector

Features:

- Contains hermetically sealed modules, internal RF matching, DC return, and RF bypass capacitor.
- The video port is protected from static or transient charges.
- Input impedance matching.
- Models may be chosen for broadband RF performance or for optimized narrow bands



Specifications:

Parameter	Specification	Units
Frequency Range (min)	1 – 18	GHz
Sensitivity (min)	1500	mV/mW
Flatness vs. Frequency (max)	1.25	±dB
Typical TSS	-50	dBm
Nominal Video Capacitance	20	pF

Notes:

Maximum input power: +20 dBm

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

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

Standard bias is 100 uA.

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

Environmental Specifications:

Designed to meet:

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

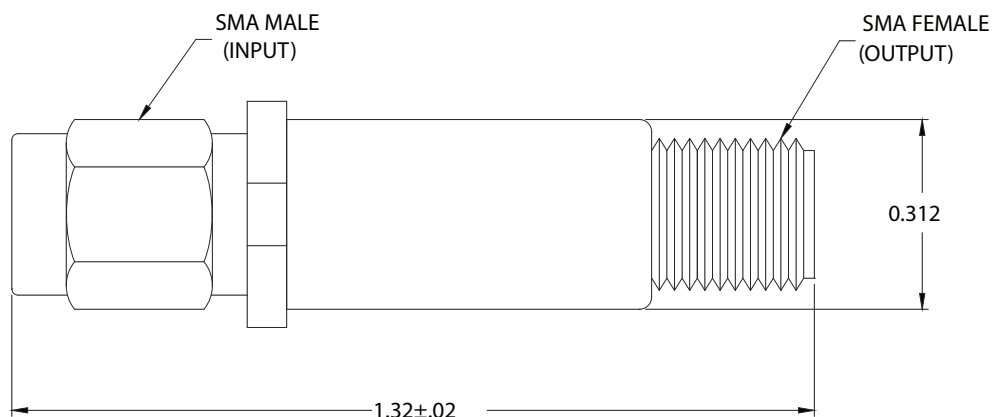
Temperature Cycle: MIL-STD-202F, M105C, Cond D



Revision Date: 9/25/2013

40 Industrial Way East, Eatontown, NJ 07724 [USA]
Phone: (732) 460-0212, Fax: (732) 460-0214
www.aeroflex.com/ascs, email: ascs-sales@eroflex.com

Outline Drawing:



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-2759N)
- Add "Z" for zero biased schottky option (Ex: ACSP-2759NZ)
- Add desired case style suffix: "C3" (Ex: ACSP-2759NZC3)
- Add "R" suffix: Reverse Connector Configuration (Ex: ACSP-2759NZC3R)
(SMA Female Input/SMA Male Output)
- Add "-RC" suffix: RoHS-compliant (Ex: ACSP-2759NZC3R-RC)

Notes (Continued):

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

Aeroflex Signal & Control Solutions

Aeroflex Microelectronic Solutions
40 Industrial Way East
Eatontown, NJ 07724 USA
Fax: (732) 460-0214

Sales

Phone: (732) 460-0212
ASCS-sales@aeroflex.com

www.aeroflex.com/Microwave www.aeroflex.com/ASCS

Aeroflex Signal & Control Solutions reserves the right to make changes to any products and services herein at any time without notice. Consult Aeroflex or an authorized sales representative to verify that the information in this data sheet is current before using this product. Aeroflex does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by Aeroflex; nor does the purchase, lease, or use of a product or service from Aeroflex convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of Aeroflex or of third parties.

Copyright 2013 Aeroflex Signal & Control Solutions. All rights reserved.

ISO 9001:2008 certified



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.