

# PADDED ZERO BIAS SCHOTTKY DETECTORS

Detectors with internal attenuators are often requested. They are typically used in circuits where an improved RF match is needed or where the power levels applied are higher than is typical for low level detectors. Frequently, they are used in laboratory applications with associated instruments such as broadband power leveling or monitoring. These detectors are all zero bias, making them convenient to use.

## Features:

- Superior Flatness vs. Frequency
- Wide Frequency Range
- Improved Return Loss
- Higher Power Handling

# Applications:

- Transmitter Monitoring
- Missile Guidance Systems
- Input to Low-Noise Amplifiers
- Broadband Or Narrowband ECM Receivers
- Power and Signal Monitors
- Doppler Radar and Beacon Receivers
- Matched units available for Multi-channel Receivers, Amplitude Comparator Systems and Discriminators
- Laboratory Test Equipment

		Flatness	Low				
Frequency		vs		Internal	Level	Standard	Optional
Range	Part (1)	Frequency	TSS	Attenuation	Sensitivity	Case	Case
(GHz)	Number	(+/-dB)	(dBm)	(dB)	(mV/mW)(2)	Styles	Styles
0.01- 12.4	ACSP2663NZ	0.5/octave	-45	6	500	C8	C15,C32
0.01- 18	ACSP2544NZ	0.5/octave	-45	6	500	СЗ	C15,C32
0.01- 18	ACSP2551NZ	0.5/octave	-44	7	400	C3	C15,C32
0.01- 20	ACSP2643NZ	0.5/octave	-46	3	1000	C3	C15,C32
0.5 - 20	ACSP2644NZ	1.0	-44	7	500	C15	C3,C32

## NOTES:

- Standard output polarity is negative. If positive output is required, substitute "P" for "N" in part number.
- Measured into an open circuit load (>10k ohm).





## **ENVIRONMENTAL SPECIFICATIONS:**

MIL-E-5400, MIL-STD-202, MIL-E-16400 Operating Temp: -65°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

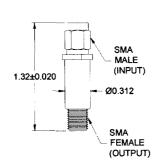
Thermal Shock: MIL-STD-202F, M204, Cond B
Temperature Cycle: MIL-STD-202F, M107, Cond D

Maximum Input Power: +23dBm

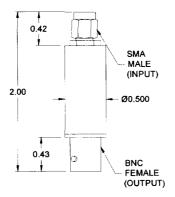
## **SCREENING:**

Standard Screening:

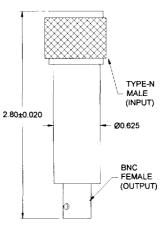
Internal Visual per MIL-STD-883, Method 2017
Temperature Cycle: -65°C to +100°C, 10 cycles
High-Rel Screening (Reference MIL-STD 883):
Internal Visual per MIL-STD-883, Method 2017
Stabilization Bake per MIL-STD 883, Method 1008
Temperature Cycle per MIL-STD 883, Method 1010
Constant Acceleration per 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



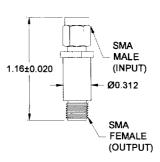
## CASE STYLE C3



CASE STYLE C15



CASE STYLE C8



CASE STYLE C32

Part Number Ordering Information: Example: ACSP2663NZC3

ACSP2663: Padded Zero Bias Schottky Detector, 0.01 - 12.4GHz

N: Negative output polarity

Z: Zero biasC3: Package type

SP-0210A