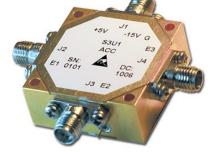
## S3S1 Pin Diode Switch Single Pole, Three Throw **Absorptive**

#### **Features:**

- Incorporated TTL-compatible driver for • convenient system integration and operates from +5V and -15V DC power supplies.
- DC blocks at all RF ports. •
- Ruggedized construction. •

Specifications:

- RoHS-compliant versions available. •
- Hermetic versions available. •



# A passion for performance

Parameter	Specification	Units			
Frequency Range	2-4	GHz			
Insertion Loss (max)	1.4	dB			
VSWR (max) 50 ohms	1.6	ratio			
Isolation (min)	75	dB			
Switching Speed (max)	100	nsec			
CW RF Power, Operating (max)	1	W			

#### Notes:

DC Bias:	+5V +/-0.5V @ 120		Cas	
(Standard)	-15V +/-3V @ 50 m		Fini	
DC Bias: (-5 option)	+5V +/-0.5V @ 150 -5V +/-0.5V @ 60 n		ГШ	
DC Bias:	+15V +/-3V @ 120		Bia:	
(-12 option)	-15V +/-3V @ 50 m		We	
Control:	TTL $0 = Low Loss$ TTL $1 = Isolation$	E1 controls J2 – J1 E2 controls J3 – J1 E3 controls J4 – J1	Мо	

Absorptive Switch: 50 ohm termination present at J2, J3 and J4 (in isolation mode).

Switching speed is defined as 50% TTL to 90% RF (t-on) and 50% TTL to 10% RF (t-off).

### **Environmental Specifications:**

MIL-E-5400, MIL-STD-202, MIL-E-16400		
Operating Temp:	-55 °C to +85 °C	
Storage Temp:	-65 °C to +125 °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	

#### **Mechanical Specifications:**

Case Style:	S3 Outline
Finish:	Gold Plate per MIL-G-45204
	Chem film per MIL-C-5541
Bias & Control Pins:	ø0.02" x 0.15" long
Weight:	35 g max
Mounting:	ø0.10″ through holes (4) places

#### **Screening:**

Internal Visual per MIL-STD-883, Method 2017 Temperature Cycle: -65 °C to +100 °C, 10 cycles

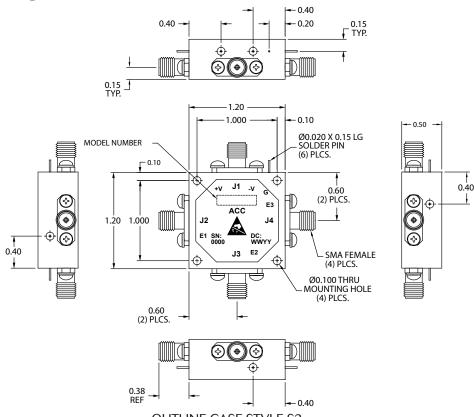
Hermetically-sealed switches are fine and gross leak checked per MIL-STD-883, Method 1014.

Optional High-Rel screening available upon request. Contact the factory to discuss your screening requirements.



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OUTLINE CASE STYLE S3

#### **Part Number Ordering Information:**

- Add "-RC" suffix: RoHS-compliant
- Add "-H" suffix: Hermetic seal
- Add "-5" suffix: +/-5V DC supplies
- Add "-5-RC" suffix: +/-5V DC supplies, RoHS-compliant
- Add "-5-H" suffix: +/-5V DC supplies, Hermetic seal
- Add "-12" suffix: +/-15V DC supplies
- Add "-12-RC" suffix: +/-15V DC supplies, RoHS-compliant
- Add "-12-H" suffix: +/-15V DC supplies, Hermetic seal

#### Aeroflex Control Components

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