

# S1L5R Pin Diode Switch

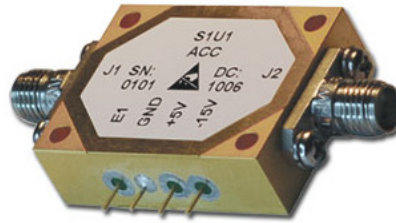
## Single Pole, Single Throw

## Reflective



### 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.
- RoHS-compliant versions available.
- Hermetic versions available.



### Specifications:

Parameter	Specification	Units
Frequency Range	1 – 12	GHz
Insertion Loss (max)	2.0	dB
VSWR (max) 50 ohms	2.0	ratio
Isolation (min)	65	dB
Switching Speed (max)	100	nsec
CW RF Power, Operating (max)	0.5	W

### Notes:

DC Bias: +5V +/-0.5V @ 50 mA max  
(Standard) -15V +/-3V @ 50 mA max

DC Bias: +5V +/-0.5V @ 60 mA max  
(-5 option) -5V +/-0.5V @ 60 mA max

DC Bias: +15V +/-3V @ 50 mA max  
(-12 option) -15V +/-3V @ 50 mA max

Control: TTL 0 = Low Loss  
TTL 1 = Isolation

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: S1 Outline

Finish: Gold Plate per MIL-G-45204

Bias & Control Pins: ø0.02" x 0.15" long

Weight: 20 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

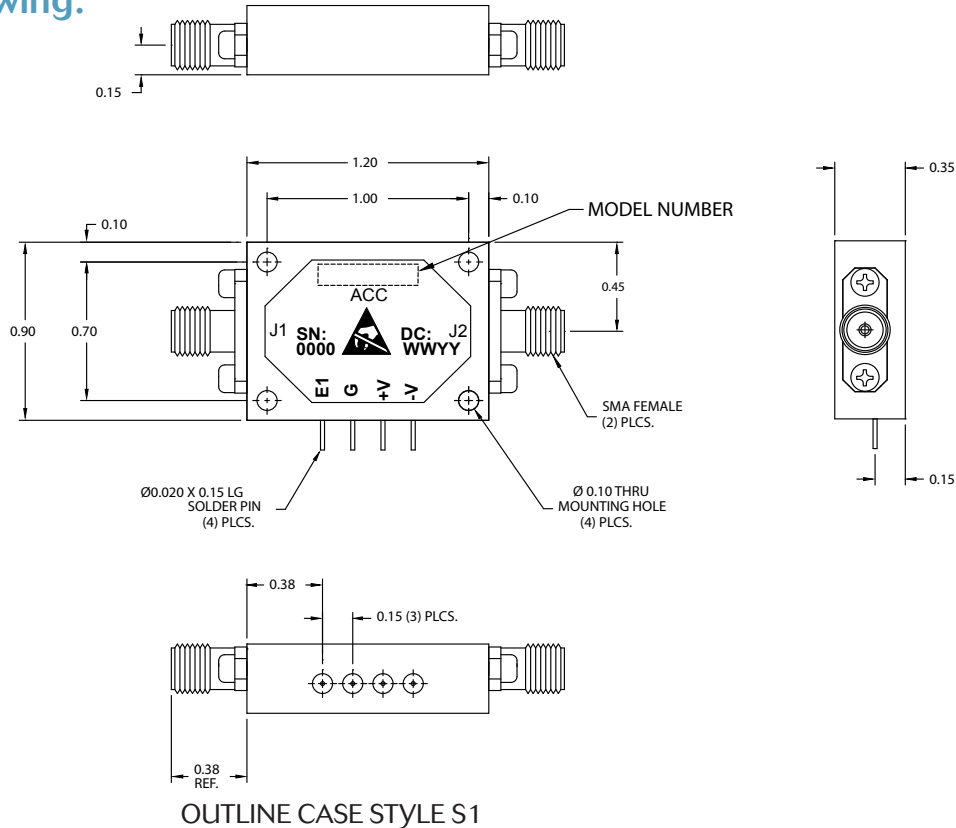
Hermetically-sealed switches are fine and gross leak checked per MIL-STD-883, Method 1014.

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



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

Outline Drawing:



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

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

[www.aeroflex.com/Microwave](http://www.aeroflex.com/Microwave) [www.aeroflex.com/ACC](http://www.aeroflex.com/ACC)

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ISO 9001:2008 certified



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