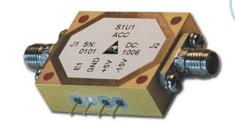
# S1K2R Pin Diode Switch Single Pole, Single Throw Reflective

#### **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	12 – 18	GHz
Insertion Loss (max)	2.0	dB
VSWR (max) 50 ohms	2.0	ratio
Isolation (min)	60	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 LossTTL 1 = Isolation

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

## **Environmental Specifications:**

Humidity: MIL-STD-202F, M103, Cond B Shock: MIL-STD-202F, M213, Cond B MIL-STD-202F, M213, Cond B MIL-STD-202F, M105, Cond B Wibration: MIL-STD-202F, M204, Cond B Thermal Shock: MIL-STD-202F, M107, Cond A 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.

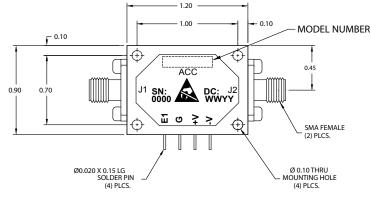
Optional High-Rel screening available upon request. Contact the factory to discuss your screening requirements.

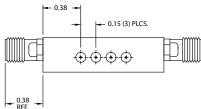


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**OUTLINE CASE STYLE S1** 

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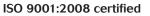
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Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.

Revision Date: 1/25/2011