# S3V6R Pin Diode Switch Single Pole, Three 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	0.1 – 10	GHz
Insertion Loss (max)	3.7	dB
VSWR (max) 50 ohms	2.0	ratio
Isolation (min)	70	dB
Switching Speed (max)	250	nsec
CW RF Power, Operating (max)	0.5	W

#### **Notes:**

DC Bias: +5V +/-0.5V @ 120 mA max (Standard) -15V +/-3V @ 50 mA max DC Bias: +5V +/-0.5V @ 150 mA max (-5 option) -5V +/-0.5V @ 60 mA max DC Bias: +15V +/-3V @ 120 mA max -15V +/-3V @ 50 mA max (-12 option)

Control: TTL 0 = Low LossE1 controls J2 - J1 TTL 1 = IsolationE2 controls J3 - J1

E3 controls J4 - J1

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 -65 °C to +125 °C Storage Temp:

Humidity: MIL-STD-202F, M103, Cond B Shock: MIL-STD-202F, M213, Cond B MIL-STD-202F, M105, Cond B Altitude: MIL-STD-202F, M204, Cond B Vibration: Thermal Shock: MIL-STD-202F, M107, Cond A MIL-STD-202F, M105C, Cond D Temperature Cycle:

# **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

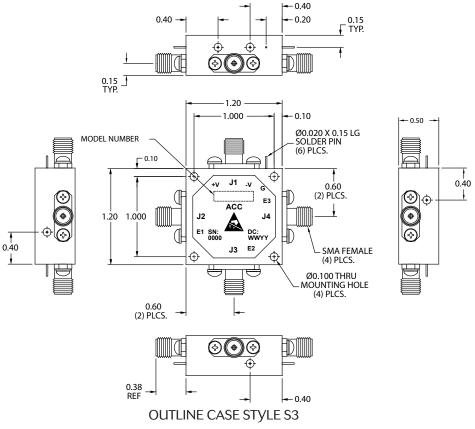
factory to discuss your screening requirements.



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# **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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#### 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.

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