

S4V4R Pin Diode Switch

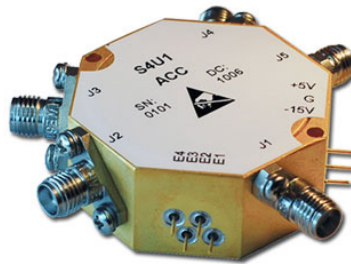
Single Pole, Four Throw

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 – 4	GHz
Insertion Loss (max)	2.8	dB
VSWR (max) 50 ohms	1.8	ratio
Isolation (min)	75	dB
Switching Speed (max)	250	nsec
CW RF Power, Operating (max)	1	W

Notes:

- DC Bias: +5V +/-0.5V @ 160 mA max
(Standard) -15V +/-3V @ 50 mA max
- DC Bias: +5V +/-0.5V @ 200 mA max
(-5 option) -5V +/-0.5V @ 60 mA max
- DC Bias: +15V +/-3V @ 160 mA max
(-12 option) -15V +/-3V @ 50 mA max
- Control: TTL 0 = Low Loss E1 controls J2 – J1
TTL 1 = Isolation E2 controls J3 – J1
E3 controls J4 – J1
E4 controls J5 – 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
- 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:

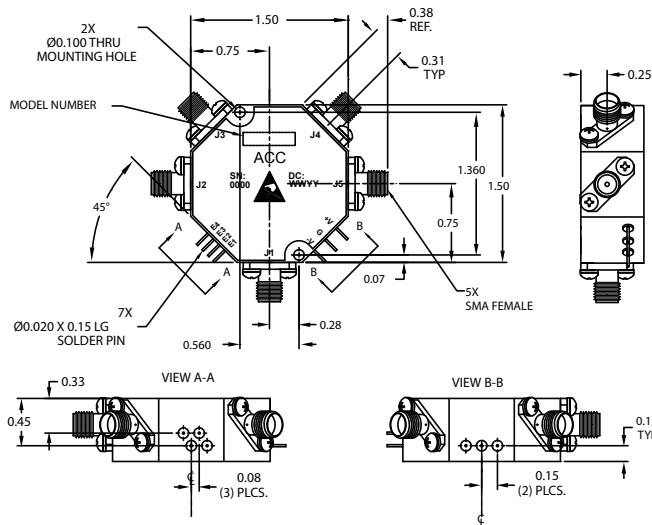
- Case Styles: S4 Outline (Four bit control)
S4-2 Outline (Two bit control)
- Finish: Gold Plate per MIL-G-45204
- Bias & Control Pins: ø0.02" x 0.15" long
- Weight: 60 g max
- Mounting: ø0.10" through holes
(2) places
- Two Bit Control: E2 E1 Low Loss Path
(-2 option) 0 0 J2 - J1
0 1 J3 - J1
1 0 J4 - J1
1 1 J5 - J1

Screening:

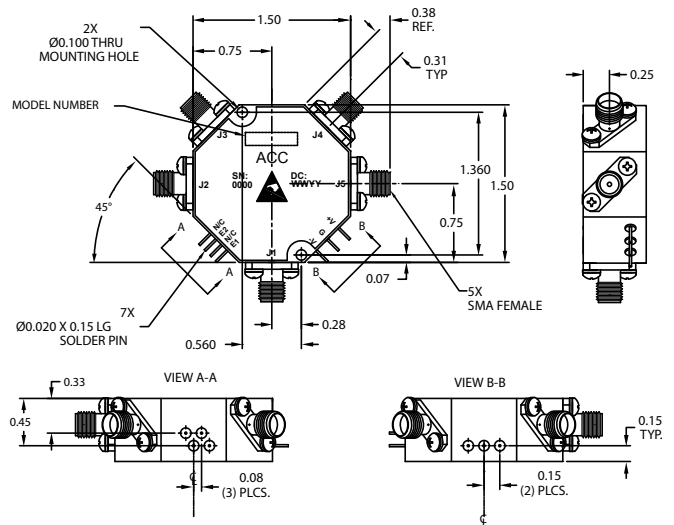
- Internal Visual per MIL-STD-883, Method 2017
- Temperature Cycle: -65 °C to +100 °C, 10 cycles
- Hermetically-sealed switches are fine and gross leak checked per MIL-STD-883, Method 1014.
- Optional High-Rel screening available upon request. Contact the factory to discuss your screening requirements.



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 CASE STYLE S4



OUTLINE CASE STYLE S4-2

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
- Add "-2" suffix: Two bit logic control
- Add "-2-RC" suffix: Two bit logic control, RoHS-compliant
- Add "-2-H" suffix: Two bit logic control, Hermetic seal
- Add "-2-5" suffix: Two bit logic control, +/-5V DC supplies
- Add "-2-5-RC" suffix: Two bit logic control, +/-5V DC supplies, RoHS-compliant
- Add "-2-5-H" suffix: Two bit logic control, +/-5V DC supplies, Hermetic seal
- Add "-2-12" suffix: Two bit logic control, +/-15V DC supplies
- Add "-2-12-RC" suffix: Two bit logic control, +/-15V DC supplies, RoHS-compliant
- Add "-2-12-H" suffix: Two bit logic control, +/-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 www.aeroflex.com/ACC

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