S4S5 Pin Diode Switch Single Pole, Four 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.
- RoHS-compliant versions available.
- Hermetic versions available.

Specifications:



A passion for performance.

Parameter	Specification	Units
Frequency Range	2 – 12	GHz
Insertion Loss (max)	2.6	dB
VSWR (max) 50 ohms	1.9	ratio
Isolation (min)	70	dB
Switching Speed (max)	100	nsec
CW RF Power, Operating (max)	0.5	W

Notes:

DC Bias: (Standard)	+5V +/-0.5V @ 160 -15V +/-3V @ 50 m		Ca
DC Bias: (-5 option)	+5V +/-0.5V @ 200 mA max -5V +/-0.5V @ 60 mA max		Fin
DC Bias: (-12 option)	+15V +/-3V @ 160 -15V +/-3V @ 50 m		Bia We
Control:	TTL $0 = Low Loss$ TTL $1 = Isolation$	E1 controls J2 – J1 E2 controls J3 – J1 E3 controls J4 – J1 E4 controls J5 – J1	Mo Tw (-2

Absorptive Switch: 50 ohm termination present at J2, J3, J4 and J5 (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 -65 °C to +125 °C Storage Temp: Humidity: MIL-STD-202F, M103, Cond B Shock: MIL-STD-202F, M213, Cond B Altitude: MIL-STD-202F, M105, Cond B 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:

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

Screening:

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

40 Industrial Way East, Eatontown , NJ 07724 [USA]

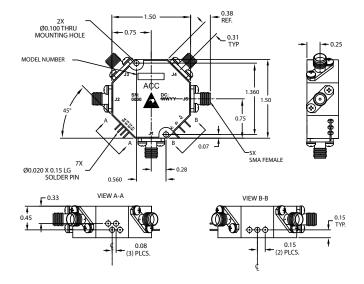
Hermetically-sealed switches are fine and gross leak checked per MIL-STD-883, Method 1014.

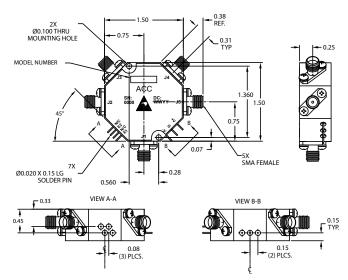
Optional High-Rel screening available upon request. Contact the factory to discuss your screening requirements.



Phone: (732) 460-0212, Fax: (732) 460-0214 www.aeroflex.com/acc, email: acc-sales@aeroflex.com







OUTLINE CASE STYLE S4

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

OUTLINE CASE STYLE S4-2

- 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



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