



# S5C4R

## SWITCH

### SINGLE-POLE, FIVE-THROW REFLECTIVE

Frequency Range (min)	4 – 16	GHz
Insertion Loss (max)	3.2	dB
VSWR (max)	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 @ 200mA max Three-line control:  
 (Standard) -15V +/-3V @ 50mA max (-3 option)

DC Bias: +5V +/-0.5V @ 250mA max (-5 option)	E3 E2 E1 Low loss path	0 0 0 J2 – J1
DC Bias: +15V +/-3V @ 200mA max (-12 option)		0 0 1 J3 – J1
		0 1 0 J4 – J1
		0 1 1 J5 – J1
		1 0 0 J6 – J1
		1 0 1 All off
Control: TTL 0 = Low Loss (Standard)		1 1 0 All off
		1 1 1 All off

E1 controls J2 – J1  
 E2 controls J3 – J1  
 E3 controls J4 – J1  
 E4 controls J5 – J1  
 E5 controls J6 – J1

**MECHANICAL SPECIFICATIONS:**

Case Style: S5 Outline (Standard logic)  
 S5-3 Outline (Three-line logic)  
 Finish: Gold plate per MIL-G-45204, Chem film per MIL-C-5541  
 Connectors: SMA Female per MIL-C-39012  
 Bias & Control Pins: ø0.02" x 0.15" long  
 Weight: 60g max  
 Mounting: ø0.10" through holes (2) places

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

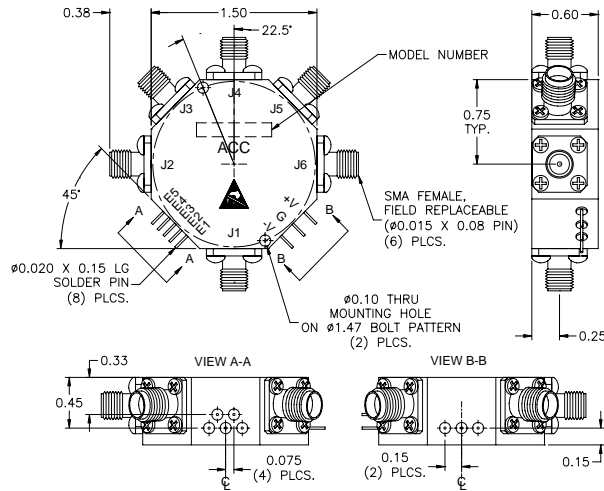
**ENVIRONMENTAL SPECIFICATIONS:**

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

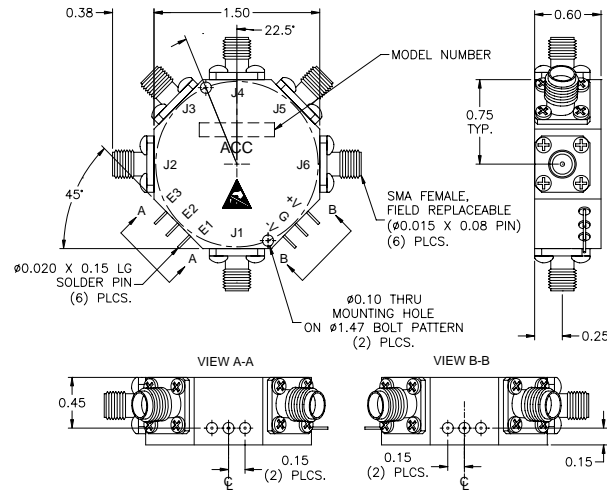
**SCREENING:**

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.



**OUTLINE CASE STYLE S5**



**OUTLINE CASE STYLE S5-3**

**PART NUMBER ORDERING INFORMATION:**

- Add "-RC" suffix: RoHS-compliant
- Add "-5" suffix: +/-5V DC supplies
- Add "-5-RC" suffix: +/-5V DC supplies, RoHS-compliant
- Add "-12" suffix: +/-12V to 18V DC supplies
- Add "-12-RC" suffix: +/-12V to 18V DC supplies, RoHS-compliant
- Add "-3": Three-line logic control
- Add "-3-RC": Three-line logic control, RoHS-compliant
- Add "-3-5" suffix: Three-line logic control, +/-5V DC supplies
- Add "-3-5-RC" suffix: Three-line logic control, +/-5V DC supplies, RoHS-compliant
- Add "-3-12" suffix: Three-line logic control, +/-12V to 18V DC supplies ECL logic input
- Add "-3-12-RC" suffix: Three-line logic control, +/-12V to 18V DC supplies, RoHS-compliant
- Add "-H" suffix: Hermetic seal (does not apply to RoHS-compliant models)