



# S5U6R

## SWITCH

### SINGLE-POLE, FIVE-THROW REFLECTIVE

|                                     |          |       |
|-------------------------------------|----------|-------|
| <b>Frequency Range (min)</b>        | 0.5 – 18 | GHz   |
| <b>Insertion Loss (max)</b>         | 3.6      | dB    |
| <b>VSWR (max)</b>                   | 2.0      | ratio |
| <b>Isolation (min)</b>              | 60       | dB    |
| <b>Switching speed (max)</b>        | 100      | nsec  |
| <b>CW RF power, operating (max)</b> | 0.5      | W     |

**NOTES:**

|                       |   |                                    |  |
|-----------------------|---|------------------------------------|--|
| DC Bias: (Standard)   | +5V +/-0.5V @ 200mA max<br>-15V +/-3V @ 50mA max  | Three-line control:<br>(-3 option) |  |
| DC Bias: (-5 option)  | +5V +/-0.5V @ 250mA max<br>-5V +/-0.5V @ 60mA max   | E3 E2 E1 Low loss path             | 0 0 0 J2 – J1<br>0 0 1 J3 – J1<br>0 1 0 J4 – J1<br>0 1 1 J5 – J1<br>1 0 0 J6 – J1<br>1 0 1 All off<br>1 1 0 All off<br>1 1 1 All off |
| DC Bias: (-12 option) | +15V +/-3V @ 200mA max<br>-15V +/-3V @ 50mA max   |                                    |  |
| Control: (Standard)   | TTL 0 = Low Loss<br>TTL 1 = Isolation   |                                    |  |
|                       | E1 controls J2 – J1<br>E2 controls J3 – J1<br>E3 controls J4 – J1<br>E4 controls J5 – J1<br>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:  $\varnothing 0.02''$  x 0.15" long  
Weight: 60g max  
Mounting:  $\varnothing 0.10''$  through holes (2) places

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

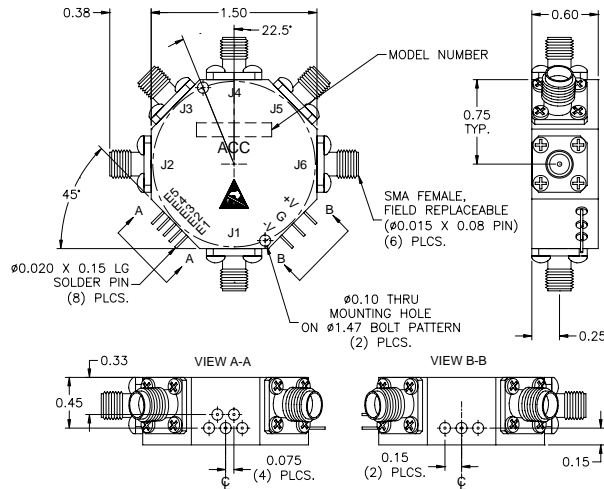
**ENVIRONMENTAL SPECIFICATIONS:**

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

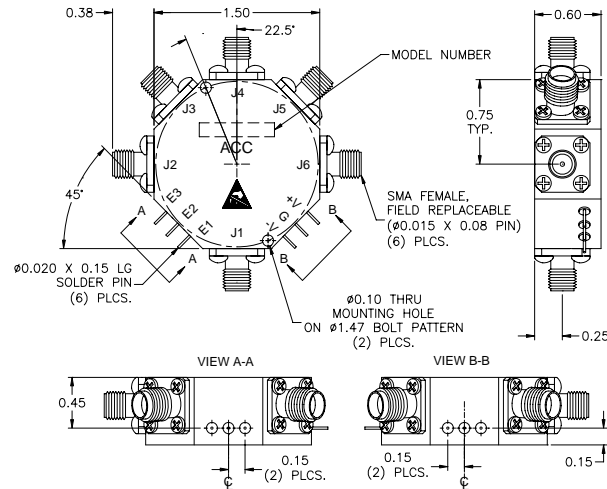
**SCREENING:**

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)