S2S7R

SWITCH
SINGLE-POLE, SINGLE-THROW
REFLECTIVE

Frequency Range (min)	2 – 18	GHz
Insertion Loss (max)	2.9	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: (Standard)	+5V +/-0.5V @ 80mA max -15V +/-3V @ 50mA max	
DC Bias: (-5 option)	+5V +/-0.5V @ 100mA max -5V +/-0.5V @ 60mA max	
DC Bias: (-12 option)	+15V +/-3V @ 80mA max -15V +/-3V @ 50mA max	
Control: (Standard)	TTL 0 = Low Loss TTL 1 = Isolation	E1 controls J2 – J1 E2 controls J3 – J1
Single Bit Control: (-1 option)	E1=0: J2 – J1 low loss, J3 – J1 isolation (E2=N/C) E1=1: J3 – J1 low loss, J2 – J1 isolation (E2=N/C)	

Absorptive switch: Internal 50Ω terminations at J2 and J3 (in isolation mode).

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

MECHANICAL SPECIFICATIONS:

Case Styles: S2 Outline (Two bit control)
S2-1 Outline (Single bit control)
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: 20g max
Mounting: ø0.10" through holes (4) places

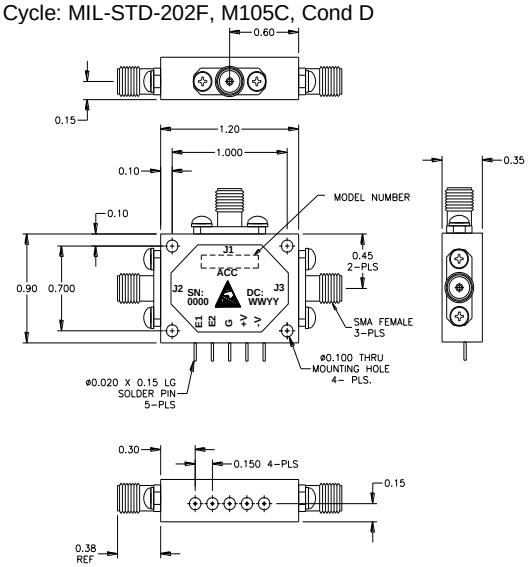
ENVIRONMENTAL SPECIFICATIONS:

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

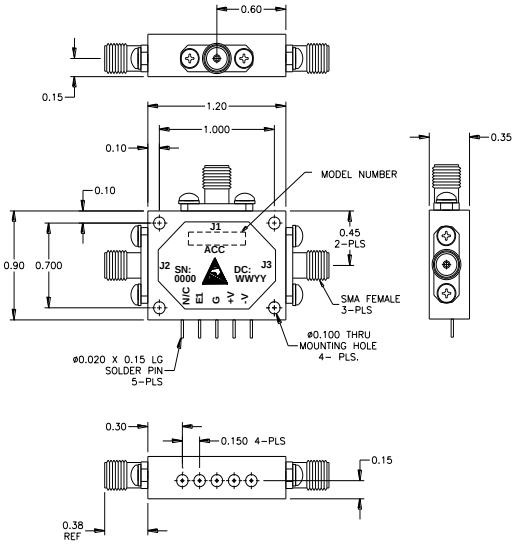
SCREENING:

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 S2



OUTLINE CASE STYLE S2-1

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 "-1": Single bit logic control
- Add "-1-RC" suffix: Single bit logic control, RoHS-compliant
- Add "-1-5" suffix: Single bit logic control, +/-5V DC supplies
- Add "-1-5-RC" suffix: Single bit logic control, +/-5V DC supplies, RoHS-compliant
- Add "-1-12" suffix: Single bit logic control, +/-12V to 18V DC supplies
- Add "-1-12-RC" suffix: Single bit logic control, +/-12V to 18V DC supplies, RoHS-compliant
- Add "-H" suffix: Hermetic seal (does not apply to RoHS-compliant

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