



S3H1R

SWITCH

SINGLE-POLE, THREE-THROW REFLECTIVE

Frequency Range (min)	0.01 – 0.1	GHz
Insertion Loss (max)	0.9	dB
VSWR (max)	1.5	ratio
Isolation (min)	75	dB
Switching speed (max)	250	nsec
CW RF power, operating (max)	1	W

NOTES:

DC Bias: +5V +/-0.5V @ 120mA max
(Standard) -15V +/-3V @ 50mA max

DC Bias: +5V +/-0.5V @ 150mA max
(-5 option) -5V +/-0.5V @ 60mA max

DC Bias: +15V +/-3V @ 120mA max
(-12 option) -15V +/-3V @ 50mA max

Control: TTL 0 = Low Loss E1 controls J2 – J1
TTL 1 = Isolation E2 controls J3 – J1
E3 controls J4 – J1

MECHANICAL SPECIFICATIONS:

Case Style: S3 Outline
Finish: Gold plate per MIL-G-45204, Chem film per MIL-C-5541
Connectors: SMA Female per MIL-C-39012
Bias & Control Pins: $\varnothing 0.02'' \times 0.15''$ long
Weight: 35g max
Mounting: $\varnothing 0.10''$ through holes (4) places

Absorptive switch: Internal 50 Ω terminations at J2, J3 and J4 (in isolation mode).

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 S3

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 "-H" suffix: Hermetic seal (does not apply to RoHS-compliant models)