



**Model: SW-S010-2S**

Description:..... SP2T, Absorptive, PIN-Switch

Operating Frequency:..... 2 - 18 GHz

Insertion Loss:

2 – 10 GHz	10 – 18 GHz
2.3 dB Max	2.7 dB Max

Isolation:

2 – 10 GHz	10 – 18 GHz
70 dB Min	60 dB Min

VSWR (RF Path “ON” or “OFF”): ..... 1.7:1 Max  
 Rise/Fall time (10% to 90% RF, 90% to 10% RF):..... 25 ns Max  
 On/Off time (50% TTL to 90% RF, 50%TTL to 10% RF): ..... 50 ns Max  
 Phase Error (Port-to-Port): ..... ±7° max  
 Operating Power:..... CW & AVG..... +24dBm (+27dbm @ COM Port)  
 ..... Peak: ..... 8W @ 1µS PW Max  
 Harmonic Distortion: ..... 65 dBc Max @ +27dBm  
 Control Input Characteristics: ..... TTL /Unit-Load, 2-Controls/Flouting-High  
 Control Logic:..... Logic “0” = RF Path “ON”  
 Power Supplies:..... +5(±0.25) V @ 75mA Max  
 ..... -12(±0.5) V @ 50mA Max  
 Connectors (RF):..... SMA (f), Removable  
 Connectors (Supplies/Control) ..... Solder Pins  
 Impedance:..... 50 Ohms Nominal  
 Weight:..... 0.7 oz [19.8 g]  
 Quality:..... Best-Commercial-Grade

**Environmental Ratings:**

Temperature:..... {Operating: -55°C to +95°C} & {Storage: -60°C to +110°C}  
 Humidity: ..... MIL-STD-202F, Method 103B, Cond. B (96 hours at 95% R.H.)  
 Shock: ..... MIL-STD-202F, Method 213B, Cond. B (75G, 6mSec)  
 Vibration: ..... MIL-STD-202F, Method 204D, Cond. B (.06” double amplitude, or 15G)  
 Altitude: ..... MIL-STD-202F, Method 105C, Cond. B (50,000 Feet)  
 Temp. Shock: ..... MIL-STD-202F, Method 107D, Cond. A (5 cycles)

**Available Options:**

(Units with listed options here may be subject to some specification tradeoffs from the standard, consult factory)

■ **Supply Voltages**

- A1 [ +5(±0.25)V / -5(±0.25)V ]
- A2 [ +5(±0.25)V / -15(±0.5)V ]
- A3 [ +12(±0.5)V / -12(±0.5)V ]
- A4 [ +15(±0.5)V / -15(±0.5)V ]

■ **RF Connectors**

- B1 [ J1 & J2 Ports with SMA(M) ]
- B2 [ All SMA (M) ]
- B3 [ COM Port with SMA(M) ]

■ **Control Connectors**

- C1 [ SMC(Jack), 50 Ω ]
- C2 [ SMB(Jack), 50 Ω ]

■ **Control Impedance**

- D1 [ 50 Ω, Internally Terminated ]

■ **Control Function**

- F1 [ Inverse Logic, (“1” = Path “ON”) ]
- F2 [ Single Toggle Control (“1” for J1 path “ON”) ]

■ **Video Suppression Filter**

- G1 [ VF @ COM Port <> 0.25 dB additional Loss ]
- G2 [ VF @ J1 & J2 Ports <> 0.25 dB additional Loss ]
- G3 [ VF @ All Ports <> 0.5 dB additional Loss ]



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### Outline

