



Model: SW-U510-2S

Description: SP2T, Absorptive, PIN-Switch

Operating Frequency: 0.5 - 18 GHz

Insertion Loss: 2.7 dB Max

Isolation (Arm-to-Arm):

0.5 – 9 GHz	9 – 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): 15 ns Max

On/Off time (50% TTL to 90% RF, 50%TTL to 10% RF): 50 ns Max

Phase Balance (Deviation from Median): $\pm 5^\circ$ max

Operating Power: CW & AVG +27dBm Max

..... (+24dBm Max into “JX” Port @ Off-State)

..... Peak: 5W @ 1 μ s PW & 10% Duty-Cycle Max

Control Input Characteristics: Std. TTL / Unit-Load / Floating-High

Control Logic: 2-Controls, 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 Ω Nominal

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]

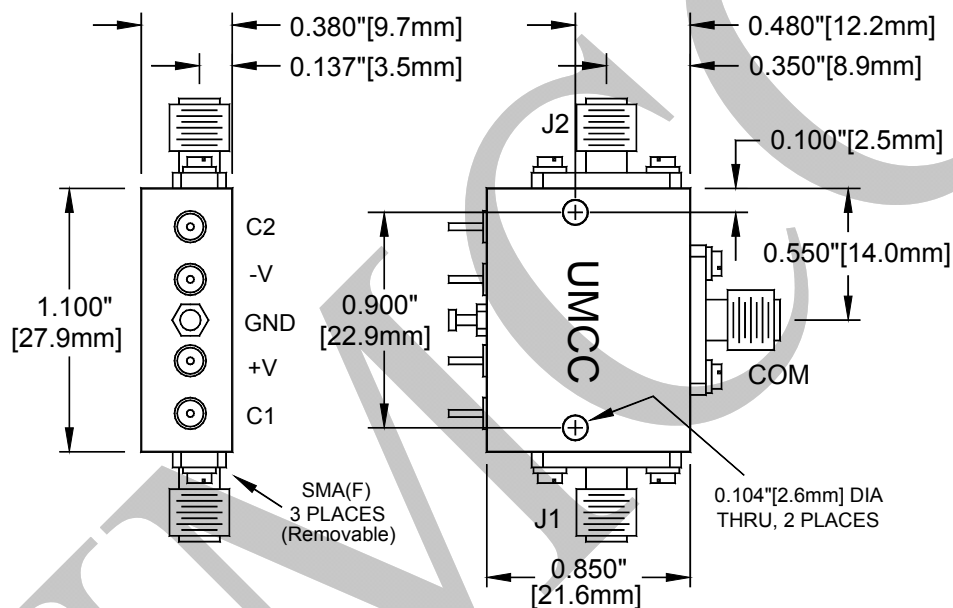
G3 [VF @ All Ports <> 0.5 dB additional Loss]

* Recommended for Low Power Consumption <> Additional Switching Delay (ON/OFF time)



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Outline



Weight	Tolerances
0.7 oz [19.8 g]	±0.015" [±0.38mm]