



Model: SW-S270-4S

Description:..... SP4T, Absorptive, PIN-Switch
 Operating Frequency:..... 2 – 18 GHz
 Insertion Loss: 2.8 dB Max
 Isolation (Arm-to-Arm):

2 – 10 GHz	10 –18 GHz
65 dB Min	55 dB Min

VSWR (RF Path “ON” or “OFF”): 1.85:1 Max
 Rise/Fall time (10% to 90% RF, 90% to 10% RF): 30 ns Max
 On/Off time (50% TTL to 90% RF, 50%TTL to 10% RF): 70 ns Max
 Phase Balance (Deviation from Median): $\pm 4^\circ$ max
 Operating Power:..... CW&AVG..... +24dBm Max
 Peak: 5W @ 1 μ S PW Max / 10% Duty-Cycle Max
 Control Input Characteristics: Std. TTL / Unit-Load / Floating-High
 Control Logic:..... 4-Controls, Logic “0” = RF Path “ON”
 Power Supplies:..... +5(± 0.25)V @ 140mA Max
 -12(± 0.5)V @ 70mA Max
 Connectors (RF):..... SMA (f), Removable
 Connectors (Supplies/Controls) 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]

■ **Control Function**

- F1 [Inverse Logic, (“1” = Path “ON”)]
- F2 [2-Bit Binary Controls + Enable] ; see below for “Outline Drawing” and “Function Table”

■ **RF Connectors**

- B1 [J1 – J4 Ports with SMA(M)]
- B2 [All SMA (M)]
- B3 [COM Port with SMA(M)]

■ **Video Suppression Filter**

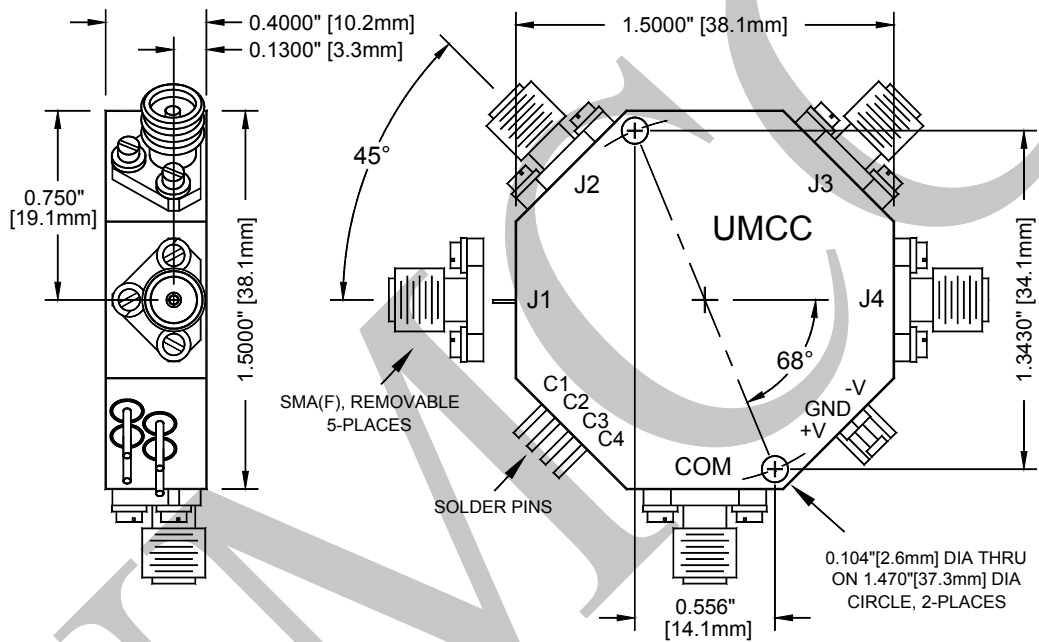
- G1 [VF @ COM Port <> 0.25 dB additional Loss]
- G2 [VF @ J1 – J4 Ports <> 0.25 dB additional Loss]
- G3 [VF @ All Ports <> 0.5 dB additional Loss]

* Recommended for Low Power Consumption ; Additional switching delay & limited power rating (consult Factory)



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Outline

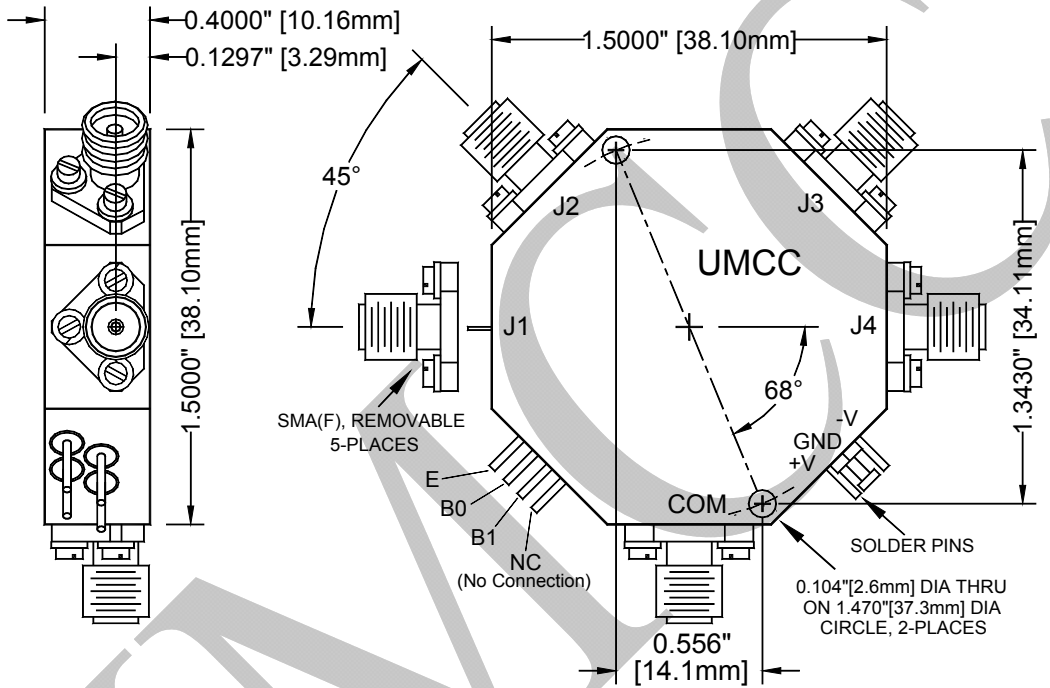


Weight	Tolerances
1.2 oz [34.0g]	±0.015" [±0.38mm]



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Outline Drawing (SP4T Radial with Option "F2")



Weight	Tolerances
1.2 oz [34.0g]	±0.015" [±0.38mm]

Function Table for Option "F2" (2-Bit Binary Control + Enable)

INPUTS			RF PATH			
E	B1	B0	J1	J2	J3	J4
1	0	0	ON	OFF	OFF	OFF
1	0	1	OFF	ON	OFF	OFF
1	1	0	OFF	OFF	ON	OFF
1	1	1	OFF	OFF	OFF	ON
0	X	X	OFF	OFF	OFF	OFF