



Model: SW-U510-5S

Description:..... SP5T, Absorptive, PIN-Switch
Operating Frequency:..... 2 – 18 GHz
Insertion Loss:..... 3.4 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”):..... 2:1 Max
Rise/Fall time (10% to 90% RF, 90% to 10% RF):... 20 ns Max
On/Off time (50% TTL to 90% RF, 50%TTL to 10% RF):..... 50 ns Max
Phase Balance (Deviation from Median):..... $\pm 6^\circ$ 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:..... 5-Controls, Logic “0” = RF Path “ON”
Power Supplies:..... +5(± 0.25)V @ 140 mA Max
..... -12(± 0.5)V @ 70 mA 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**

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 – J5 Ports with SMA(M)]
B2 [All SMA (M)]
B3 [COM Port with SMA(M)]

■ **Control Function**

F1 [Inverse Logic, (“1” = Path “ON”)]
F2 [3-Bit Binary Controls + Enable] ; see below for
“Outline Drawing” and “Function Table”

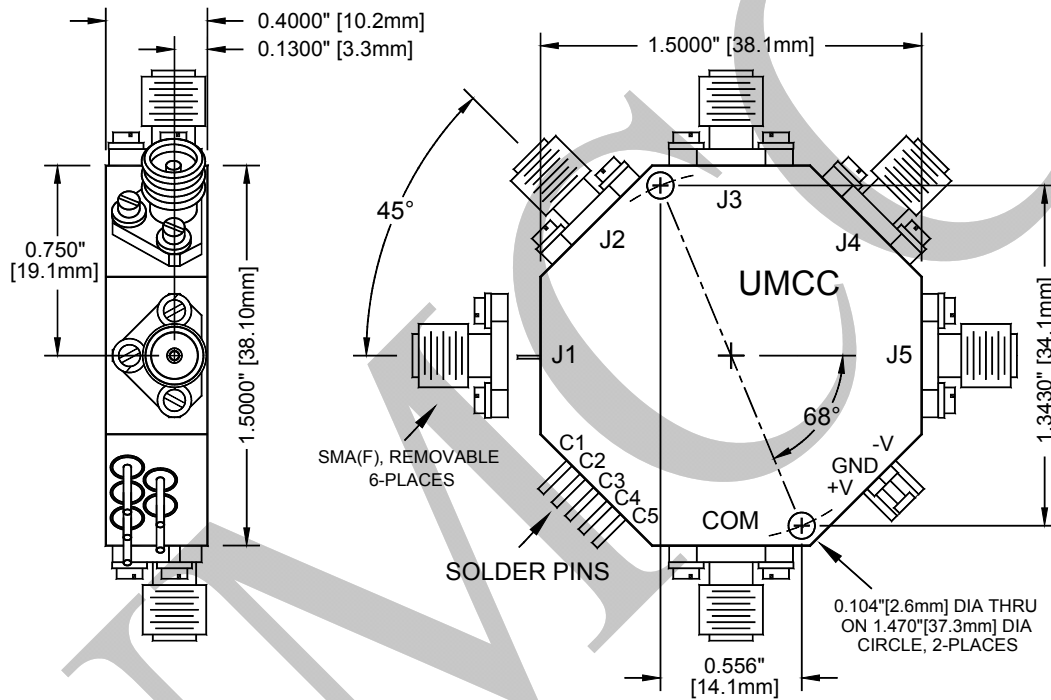
■ **Video Suppression Filter**

G1 [VF @ COM Port <> 0.25 dB additional Loss]
G2 [VF @ J1 – J5 Ports <> 0.25 dB additional Loss]
G3 [VF @ All Ports <> 0.5 dB additional Loss]



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Outline

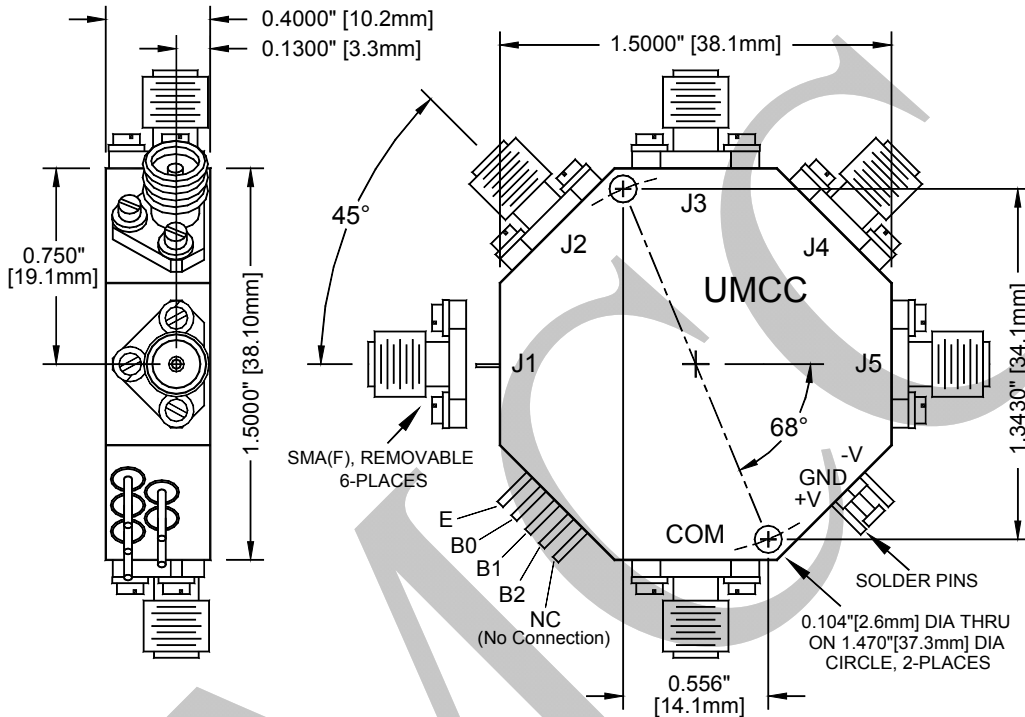


Weight	Tolerances
1.3 oz [36.9g]	±0.015" [±0.38mm]



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Outline Drawing (SP5T Radial with Option "F2")



Weight	Tolerances
1.3 oz [36.9g]	±0.015" [±0.38mm]

Function Table for Option "F2" (3-Bit Binary Control + Enable)

INPUTS				RF PATH				
E	B2	B1	B0	J1	J2	J3	J4	J5
1	0	0	0	ON	OFF	OFF	OFF	OFF
1	0	0	1	OFF	ON	OFF	OFF	OFF
1	0	1	0	OFF	OFF	ON	OFF	OFF
1	0	1	1	OFF	OFF	OFF	ON	OFF
1	1	0	0	OFF	OFF	OFF	OFF	ON
0	X	X	X	OFF	OFF	OFF	OFF	OFF