



**Model: SR-K01W-16S**

Description: ..... SP16T, Absorptive, PIN-Switch

Operating Frequency:..... 1 – 15 GHz

Insertion Loss:..... 5.2 dB Max

Isolation (Arm-to-Arm):

| 1 – 6 GHz | 6 – 12.4 GHz | 12.4 –15 GHz |
|-----------|--------------|--------------|
| 70 dB Min | 65 dB Min    | 60 dB Min    |

VSWR (“ON” paths & “OFF” ports):..... 1.9:1 Max

Rise/Fall time (10% to 90% RF, 90% to 10% RF): ... 250 ns Max

On/Off time (50% TTL to 90% RF, 50%TTL to 10% RF): ..... 300 ns Max

Operating Power: ..... CW & AVG..... +27dBm Max \*

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

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

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

Control Logic: ..... 16-Controls, Logic “0” = RF Path “ON”

Power Supplies: ..... +5(±0.25)V @ 430mA Max

..... -12(±0.5)V @ 150mA 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 ]

■ **RF Connectors**

B1 [ J1 – J16 Ports with SMA(M) ]

B2 [ All SMA (M) ]

B3 [ COM Port with SMA(M) ]

■ **Control Function**

F1 [ Inverse Logic, (“1” = Path “ON”) ]

F2 [ 4-Bit Binary Controls + Enable ] ; see below for  
“Outline Drawing” and “Function Table”

■ **Video Suppression Filter**

G1 [ VF @ COM Port <> 0.25 dB additional Loss ]

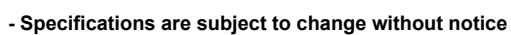
G2 [ VF @ J1 – J16 Ports <> 0.25 dB additional Loss ]

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

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



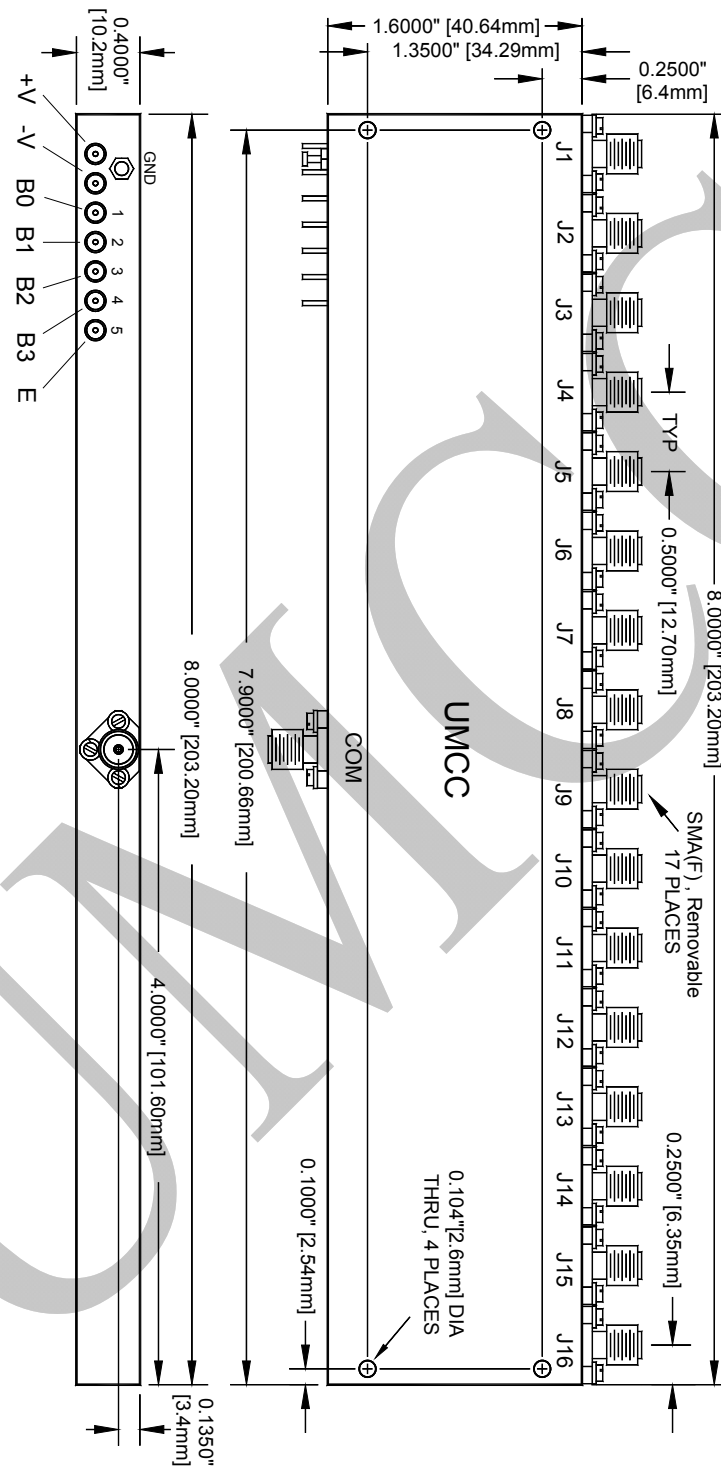
### Outline (Standard 16 Controls)





**Model: SR-K01W-16S**

**Outline (Option "F2" for 4-Bit Binary Control + Enable)**



| Weight        | Tolerances        |
|---------------|-------------------|
| 6.5 oz [184g] | ±0.015" [±0.38mm] |



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**Function Table for Option "F2" (4-Bit Binary Control + Enable)**

| INPUTS |    |    |    |    | RF PATH FROM "COM" PORT TO "JXX" PORT |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------|----|----|----|----|---------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| E      | B3 | B2 | B1 | B0 | J1                                    | J2  | J3  | J4  | J5  | J6  | J7  | J8  | J9  | J10 | J11 | J12 | J13 | J14 | J15 | J16 |
| 0      | 0  | 0  | 0  | 0  | ON                                    | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 0  | 0  | 0  | 1  | OFF                                   | ON  | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 0  | 0  | 1  | 0  | OFF                                   | OFF | ON  | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 0  | 0  | 1  | 1  | OFF                                   | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 0  | 1  | 0  | 0  | OFF                                   | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 0  | 1  | 0  | 1  | OFF                                   | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 0  | 1  | 1  | 0  | OFF                                   | OFF | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 0  | 1  | 1  | 1  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 1  | 0  | 0  | 0  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 1  | 0  | 0  | 1  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF | OFF |
| 0      | 1  | 0  | 1  | 0  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF |
| 0      | 1  | 0  | 1  | 1  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF |
| 0      | 1  | 1  | 0  | 0  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF |
| 0      | 1  | 1  | 0  | 1  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON  | OFF | OFF |
| 0      | 1  | 1  | 1  | 0  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON  | OFF |
| 0      | 1  | 1  | 1  | 1  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON  |
| 1      | X  | X  | X  | X  | OFF                                   | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |