

## X-Band SP4T Switch Requirements

### RF Requirements

Frequency Range: 9.0 – 11.0 GHz

Isolation: 65 dB Min

Insertion Loss: 2.0 dB Goal, 2.5 dB Max

Return Loss, ON/OFF: 18 dB Max (output ports), 15 dB Max (common port off)

Phase Match: +/-5.0 Degrees, Port-to-Port

RF Input Power: +20 dBm CW, +25 dBm Max

Switching Time: 100 ns Max

RF Connectors: SMA, Female

### Logic Requirements

Logic Control: 3 BITS, LVPECL Compatible

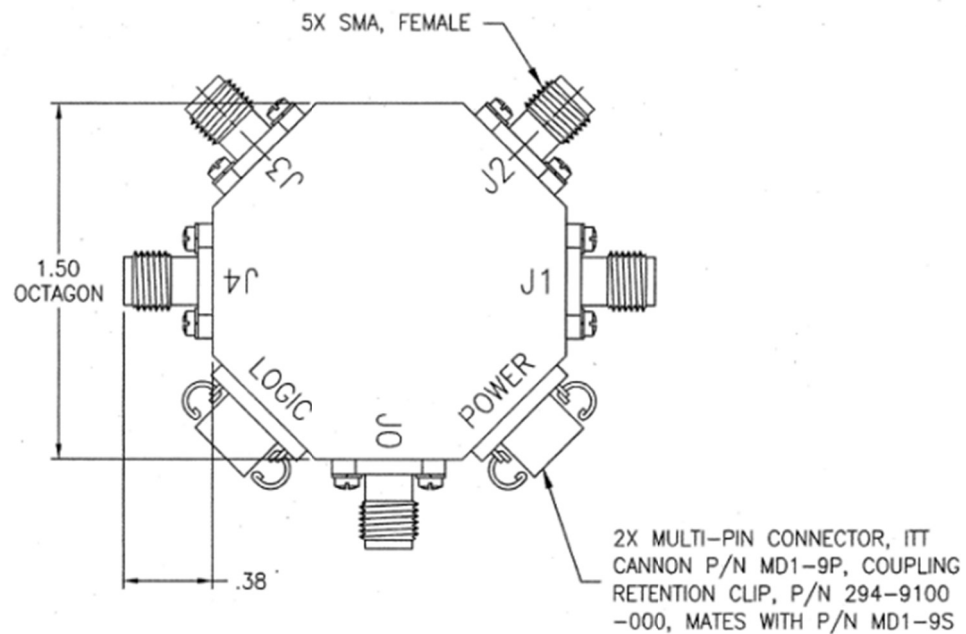
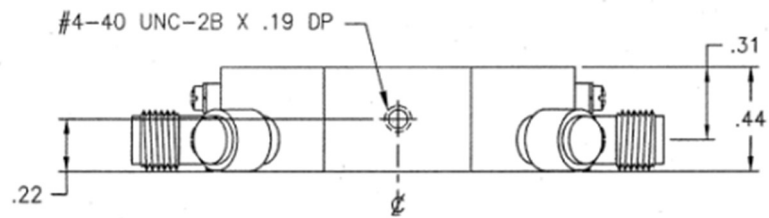
Switching Rate: 10 MHz Min

Power Supply: +/-5 VDC @ +100/-20 mA

Power Connections: 3 Pins

Logic Connections: 6 Pins

Physical Package: See below



LOGIC TABLE

BIT 0	BIT 1	BIT 2	FUNCTION
0	0	1	J0-J1
1	0	1	J0-J2
0	1	1	J0-J3
1	1	1	J0-J4
X	X	0	ALL OFF

LOGIC CONNECTIONS

POWER CONNECTIONS

PIN	FUNCTION	PIN	FUNCTION
1	BIT 0 +	1	N/C
2	BIT 0 -	2	N/C
3	BIT 1 +	3	N/C
4	BIT 1 -	4	N/C
5	BIT 2 +	5	N/C
6	BIT 2 -	6	N/C
7	N/C	7	+5 VDC
8	N/C	8	-5 VDC
9	N/C	9	GND

ALL UN-USED PINS HAVE NO INTERNAL CONNECTIONS