

Matched SP4T RF Switch

20 - 1500 MHz

SW-164

V2.00

Features

- Internally Terminated
- Integral TTL Driver
- Low Loss - 0.9 dB Typical

Guaranteed Specifications* (From -55°C to +85°C)

Frequency Range	20-1500 MHz	
Insertion Loss	20-1500 MHz	2.0 dB Max
	20-1000 MHz	1.5 dB Max
	30-500 MHz	1.2 dB Max
VSWR (All States)	20-1500 MHz	1.80:1 Max
	20-1000 MHz	1.50:1 Max
	30-500 MHz	1.25:1 Max
Isolation	20-1500 MHz	35 dB Min
	20-1000 MHz	40 dB Min
	20-500 MHz	50 dB Min

Operating Characteristics

Impedance	50 Ohms Nominal	
Switching Characteristics		
t _{ON}		3.0 μ S Typ
t _{OFF}		1.5 μ S Typ
Transients (In-Band)		40 mV Typ
Input Power	20-1500 MHz	+ 5 dBm Typ
for 1 dB Compression	50-1500 MHz	+ 15 dBm Typ
Intermodulation Intercept Point (for two-tone input power up to + 5 dBm)		
Second Order	(20-1500 MHz)	+ 55 dBm Typ
	(50-1500 MHz)	+ 70 dBm Typ
Third Order	(20-1500 MHz)	+ 25 dBm Typ
	(50-1500 MHz)	+ 40 dBm Typ
Bias Power	+ 9 to + 15 VDC @ 50 mA Max - 5 VDC \pm 5% @ 25 mA Max (550 mW Typical)	

Environmental

MIL-STD-883 screening available.

*All specifications apply when operated with bias voltages of +12 VDC and -5 VDC (\pm 5%) and 50 ohm impedance at all RF ports

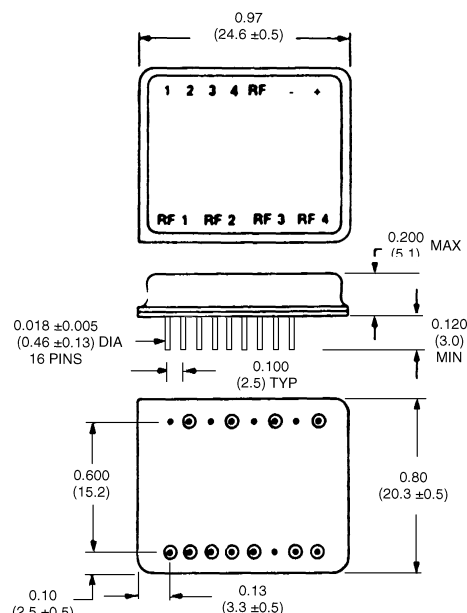
Ordering Information

Model Number	Package
SW-164 PIN	Dual Inline

Truth Table

TTL CONTROL INPUTS				CONDITION OF SWITCH			
"1" = TTL LOGIC HIGH				RF COMMON TO EACH RF PORT			
1	2	3	4	RF1	RF2	RF3	RF4
1	0	0	0	ON	OFF	OFF	OFF
0	1	0	0	OFF	ON	OFF	OFF
0	0	1	0	OFF	OFF	ON	OFF
0	0	0	1	OFF	OFF	OFF	ON

DI-2



Dimensions in () are in mm.

Unless Otherwise Noted: .xxx = \pm 0.010 (.xx = \pm 0.25)
.xx = \pm 0.02 (.x = \pm 0.5)

Typical Performance

