

# Matched SP4T RF Switch 20 - 1500 MHz

# **SW-164**

V2.00

#### **Features**

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

Guaranteed Spe	(From -55°C to +85°C) 20-1500 MHz		
Frequency Range			
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 Mir	
	20-500 MHz	50 dB Min	

## **Operating Characteristics**

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Impedance	50 Ohms Nominal			
<b>Switching Characteristi</b>	cs			
ton	3.0 μS Typ			
toff		1.5 μS Typ		
Transients (In-Band)		40 mV Typ		
Input Power	20-1500 MHz	+ 5 dBm Typ		
for 1 dB Compression	50-1500 MHz	+ <u>15</u> dBm Typ		
Intermodulation Interce Point (for two-tone inpu				
power up to +5 dBm)				
Second Order	(20-1500 MHz)	+ 55 dBm <u>T</u> yp		
	(50-1500 MHz)	+ 70 dBm Typ		
Third Order	(20-1500 MHz)	+ 25 dBm Typ		
	(50-1500 MHz)	+ 40 dBm Typ		
Bias Power	+9to +15 VDC @ 50 mA Max			
	- 5 VDC ± 5% @ 25 mA Max			
	(550 mW Typical)			

#### Environmental

MIL-STD-883 screening available.

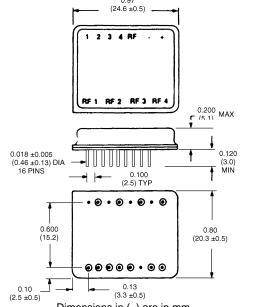
#### Ordering Information

Model Number SW-164 PIN Package 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
1	0	n	۱۰	1	OFF	OFF	OFF	lon

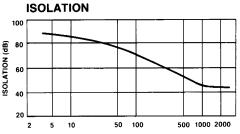
#### DI-2

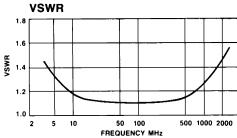


Dimensions in ( ) are in mm. Unless Otherwise Noted:  $.xxx = \pm 0.010$  ( $.xx = \pm 0.25$ )  $.xx = \pm 0.02$  ( $.x = \pm 0.5$ )

### **Typical Performance**

# #85°C +25°C 2 5 10 50 100 500 1000 2000





Specifications Subject to Change Without Notice.

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