

# SP3T RF SWITCH

## MODEL TWH5016

Package: 12 Pin TO-8B (T9)  
Also available in SMAConnectorized Housings

### Features

- 10 - 3000 MHz
- RF1-RF3 Reflective in 'OFF' State
- Integral TTL Driver
- Reflective
- Environmental Screening available

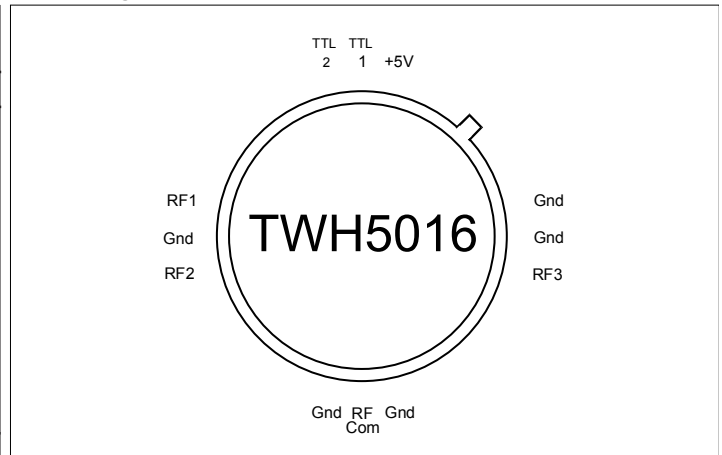
### Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -55°C to +100 °C  
Storage Temperature ..... -65°C to 125 °C  
Case Temperature ..... +125 °C  
DC Voltage ..... + 6.0 Volts  
Continuous RF Input Power ..... +32 dBm

### Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +100 °C
Frequency	10 - 3000 MHz	10 - 3000 MHz
Insertion Loss (dB)		
10 - 100 MHz	1.0	1.5 Max.
100 - 1500 MHz	1.2	1.6 Max.
1500 - 3000 MHz	1.4	2.4 Max.
Isolation (dB)		
10 - 100 MHz	70	60 Min.
100 - 1500 MHz	45	35 Min.
1500 - 3000 MHz	35	30 Min.
1dB Compression (dBm)		
10 - 100 MHz	18	8 Min.
100 - 1500 MHz	27	20 Min.
1500 - 3000 MHz	30	29 Min.
VSWR 'ON'	1.3:1	1.6:1 Max.
Switching Speed (µsec) (50% TTL to 90% RF)	2.0	3.0 Max.
DC Bias (mA) (4.5 to 5.5 VDC)	2.4	4.0 Max.

### Pin Layout

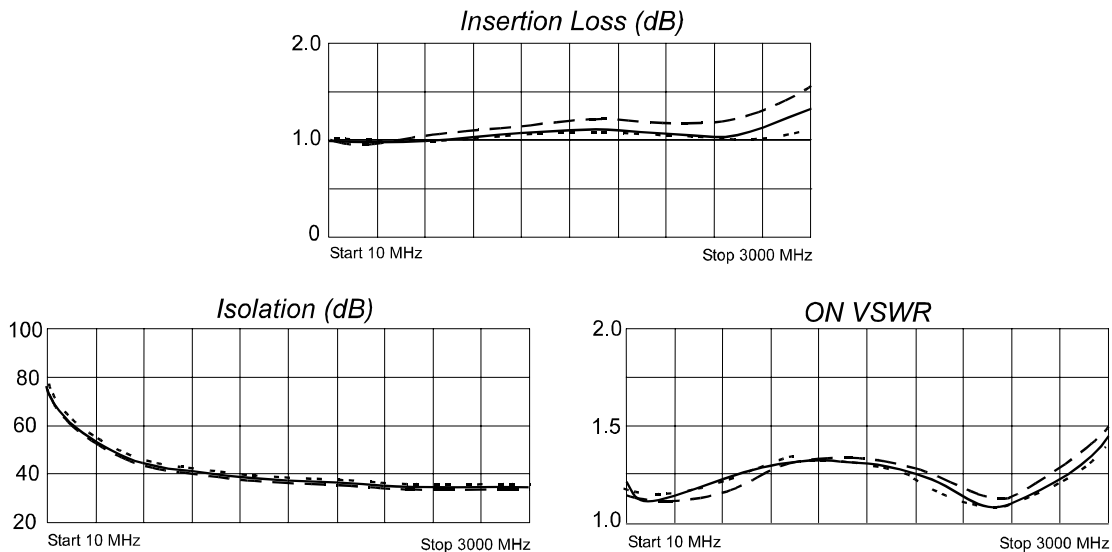


### Truth Table

TTL Control Inputs		Switch Position
TTL1	TTL2	RF Common Connected To
0	0	RF1
1	0	RF2
0	1	RF3

Note: Care should always be taken to effectively ground the case of each unit.

### Typical Performance Data



Legend ——— +25 °C - - - - +85 °C . . . . . -55 °C



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