

# SPDT RF SWITCH

## MODEL TWH7230

Available as: TWH7230, 12 Pin TO-8B (T9)  
TWN7230, 10 Pin .625" Sq. Gullwing (SG4)

### Features

- 10 - 3000 MHz
- RF1, RF2 Reflective in 'OFF' State
- Integral TTL Driver
- Reflective
- Environmental Screening available

### Absolute Maximum (No Damage) Ratings

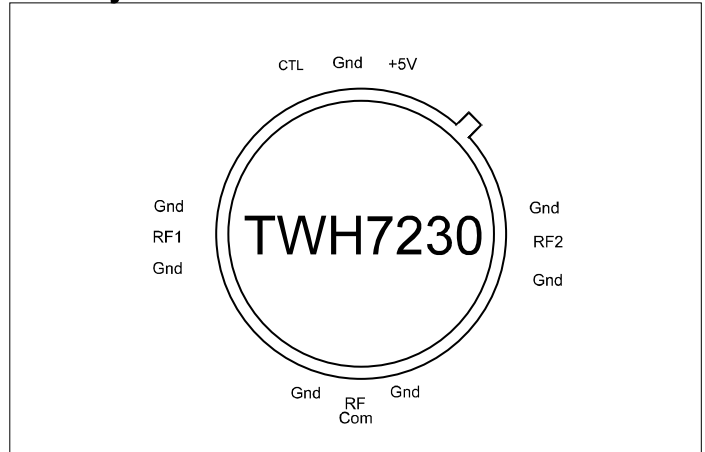
Ambient Operating Temperature ..... -55°C to + 100 °C  
Storage Temperature ..... -65°C to + 125 °C  
Case Temperature ..... + 125 °C  
DC Voltage ..... + 6.0 Volts  
Continuous RF Input Power ..... +32 dBm

### Specifications

| CHARACTERISTIC                                | TYPICAL<br>Ta = 25 °C | MIN/MAX<br>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)<br>(50% TTL to 90% RF) | 2.0                   | 3.0 Max.                          |
| DC Bias (mA)<br>(4.5 to 5.5 VDC)              | 2.4                   | 4.0 Max.                          |

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

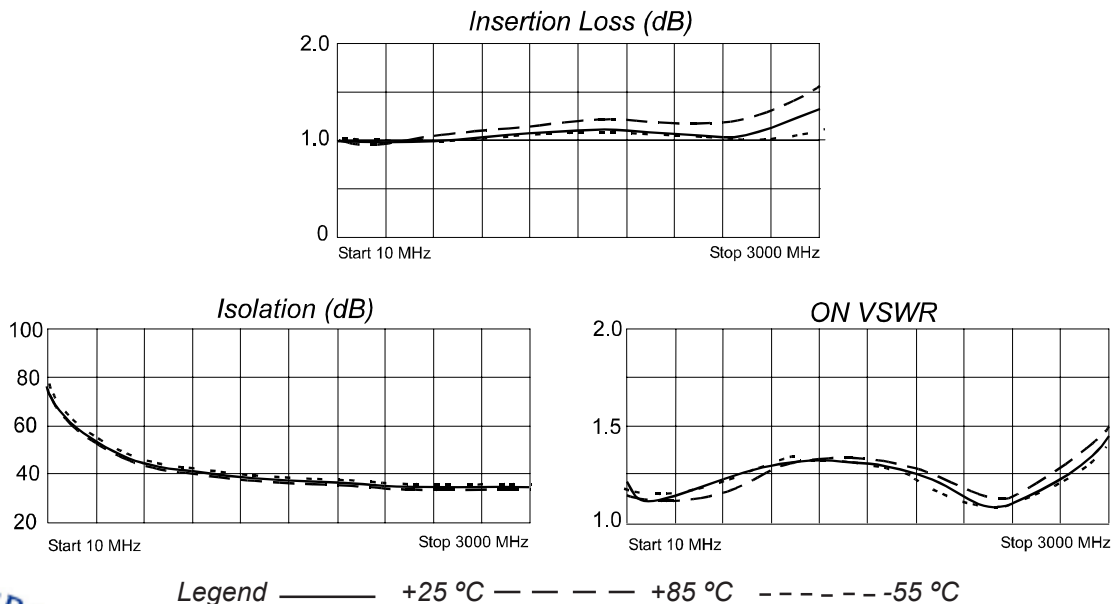
### Pin Layout



### Truth Table

| TTL Control Inputs | Switch Position        |
|--------------------|------------------------|
| TTL                | RF Common Connected To |
| 0                  | RF1                    |
| 1                  | RF2                    |

### Typical Performance Data



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