

SP3T RF Switch

Fast Switching Speed: 15 ns (GaAs)

Model TWD2241

5 to 2000 MHz

Features

- 5- 2000 MHz
- Fast Switching Speed: 15 ns Typical (GaAs)
- Integral TTL Driver
- Operating Temp. - 55 °C to + 85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = - 55 °C to + 85 °C
Frequency	5 - 2000 MHz	5 - 2000 MHz
Insertion Loss (dB)	1.2	1.8 Max.
Isolation (dB)	50	35 Min.
VSWR	1.5:1	2.0:1 Max.
DC Bias Vdc	+5 V	+5 V Max.
Bias mA	0.5	1.0 Max.
Switching Speed (nsec)	15	20 Max.
Transients (mV)	80	—
1 dB Compression (dBm)		
0.05 GHz	21	—
0.5 - 2 GHz	27	—
Intercept Points (dBm)	IP ₂ IP ₃	—
0.05 GHz	+62 +40	—
0.5 - 2 GHz	+68 +46	—

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

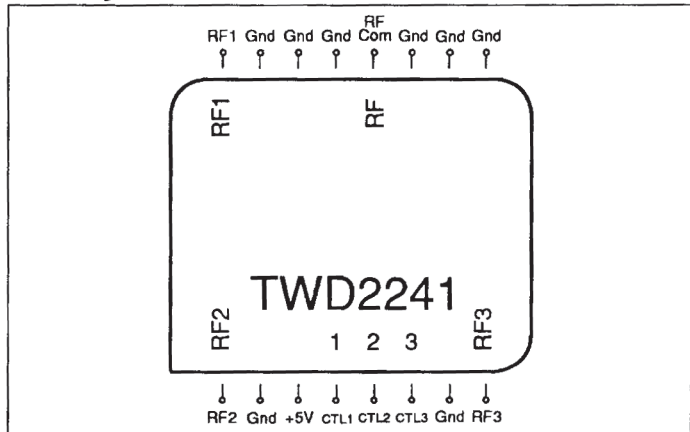
Maximum Ratings

Ambient Operating Temperature - 55 °C to + 100 °C
 Storage Temperature - 65 °C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 7.0 Volts
 Continuous RF Input Power +30 dBm

Packaging Options (see Appendix)

DP-10, 16 Pin DIP Package
 and Connectorized Housings

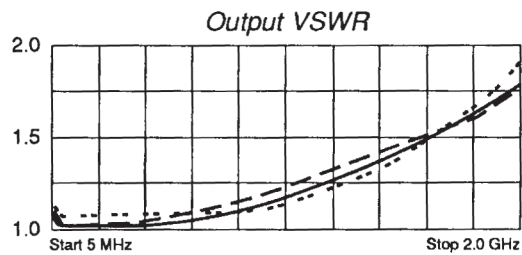
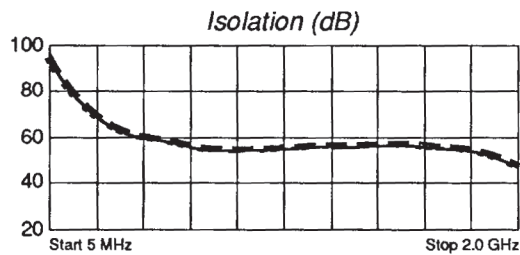
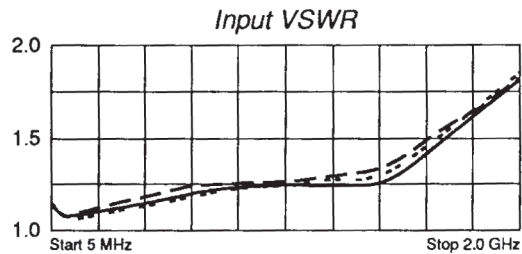
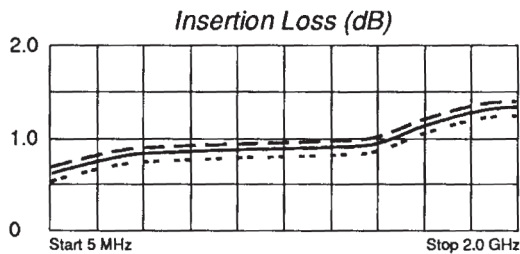
Pin Layout



Truth Table

Control Input	Switch Condition
TTL	RF Common To RF Throw
1	Low Loss
0	Isolated

Typical Performance Data



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

