



# Matched SPST RF Switch 20 - 1500 MHz

SW-161

V3.00

## Features

- Internally Terminated
- Integrated TTL Driver
- Low Loss: 0.8 dB typ.
- MIL-STD-883 Screening Available

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

Frequency Range	20-1500 MHz	
Insertion Loss	20-1500 MHz	1.5 dB Max
	20-1000 MHz	1.2 dB Max
	30-500 MHz	1.0 dB Max
VSWR (All States)	20-1500 MHz	1.50:1 Max
	30-1000 MHz	1.25:1 Max
Isolation	20-1500 MHz	40 dB Min
	20-1000 MHz	50 dB Min
	20-500 MHz	60 dB Min

## Operating Characteristics

Impedance	50 Ohms Nominal	
Switching Characteristics		
t <sub>ON</sub>	3.0 μS Typ	
t <sub>OFF</sub>	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	+ 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 @ 35 mA Max - 5 VDC ± 5% @ 35 mA Max (450 mW Typical)	

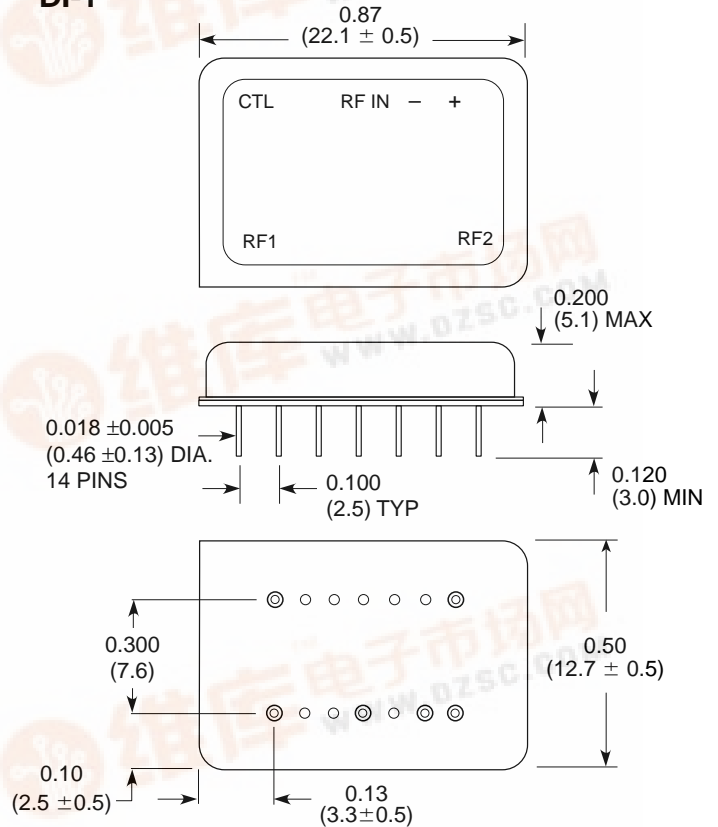
\* All Specifications apply when operated with bias voltages of +12 VDC and -5 VDC (±5%) and 50 ohm impedance at all RF ports.

## Ordering Information

Part Number  
SW-161 PIN

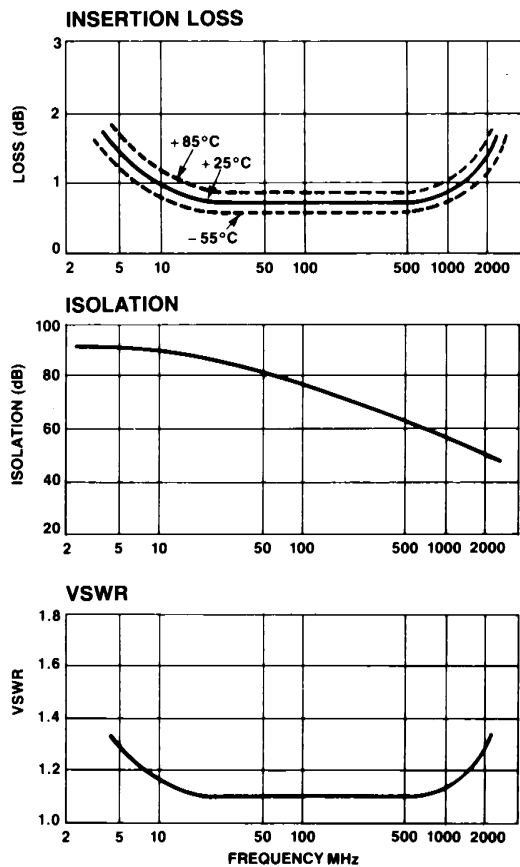
Package  
Dual Inline

## DI-1



Dimensions in ( ) are in mm.  
Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)  
.xx = ±0.02 (.x = ±0.5)  
WEIGHT (APPROX.): 0.14 OUNCES 4 GRAMS

Typical Performance



Truth Table

TTL CONTROL INPUT "1" = TTL LOGIC HIGH	CONDITION OF SWITCH RF PATH RF1 TO RF2
0	OFF
1	ON