

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 _{ON}		3.0 μ S Typ
t _{OFF}		1.5 μ S 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 $\pm$ 5% @ 35 mA Max (450 mW Typical)	

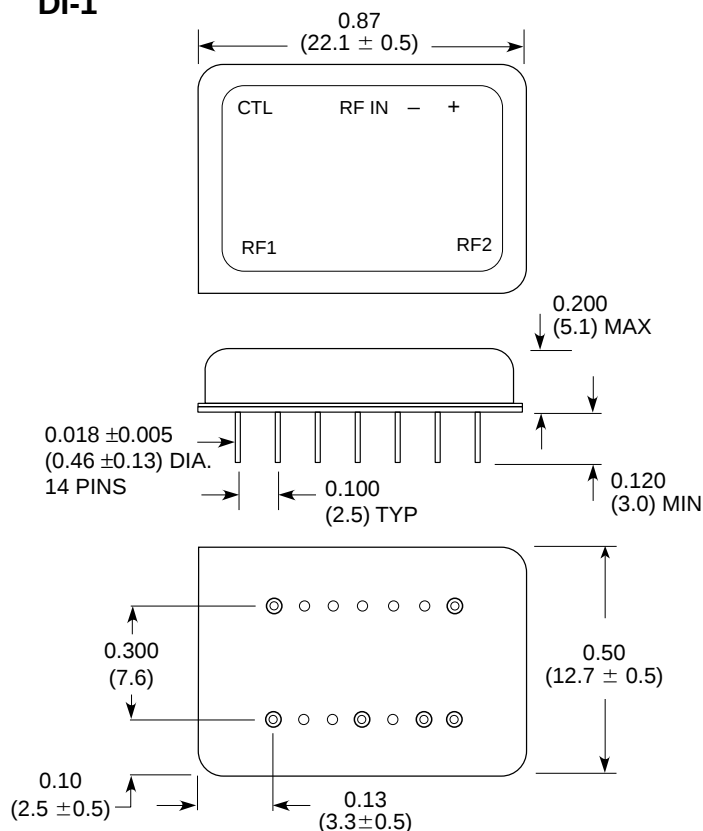
* All Specifications apply when operated with bias voltages of +12 VDC and -5 VDC ($\pm$ 5%) and 50 ohm impedance at all RF ports.

Ordering Information

Part Number
SW-161 PIN

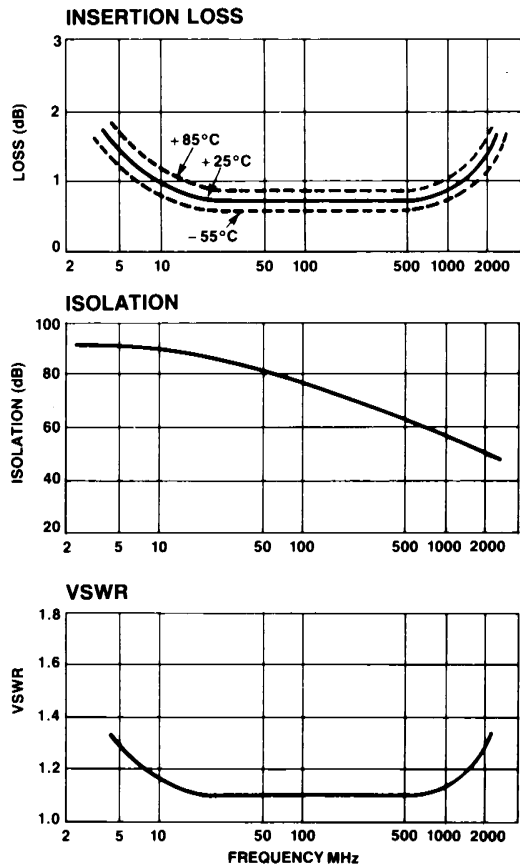
Package
Dual Inline

DI-1



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