

GaAs SPDT Switch

5 - 3000 MHz

SW-207

V2.00

Features

- Low Insertion Loss: 1.0 dB Typ.
- Fast Switching Speed
- Low DC Power Consumption
- Integral TTL
- MIL-STD-883 Screening Available

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

Frequency Range	5 - 3000 MHz	
Insertion Loss	5 - 3000 MHz	2.3 dB Max.
	5 - 2000 MHz	1.4 dB Max.
	5 - 1000 MHz	1.0 dB Max.
VSWR	5 - 3000 MHz	2.5:1 Max.
	5 - 2000 MHz	1.7:1 Max.
	5 - 1000 MHz	1.5:1 Max.
Isolation	5 - 3000 MHz	18 dB Min.
	5 - 2000 MHz	28 dB Min.
	5 - 1000 MHz	38 dB Min.

Operating Characteristics

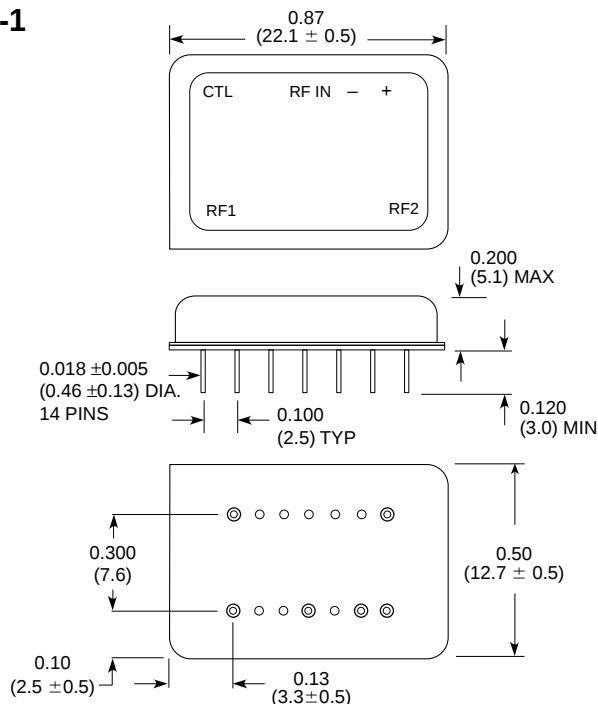
Impedance	50 Ohms Nominal	
Switching Characteristics		
'RISE, 'FALL	7 ns Typ.	
'ON, 'OFF (50% CTL to 90/10% RF)	20 ns Typ.	
Transients (In-Band)	70 mV Typ.	
Input Power for 1 dB Compression		
0.5 - 3 GHz	+ 27 dBm Typ.	
0.05 GHz	+ 21 dBm Typ.	
Intermodulation Intercept Point (for two-tone input power up to +13 dBm)		
Intercept Points	IP ₂	IP ₃
0.5 - 3 GHz	+ 68 dBm Typ.	+ 46
0.05 GHz	+ 60 dBm Typ.	+40
Bias Power	+5 VDC @ 1 mA Max.	

* All specifications apply when operated with bias voltages of + 5 VDC and 50 ohm impedance at all RF ports.

Ordering Information

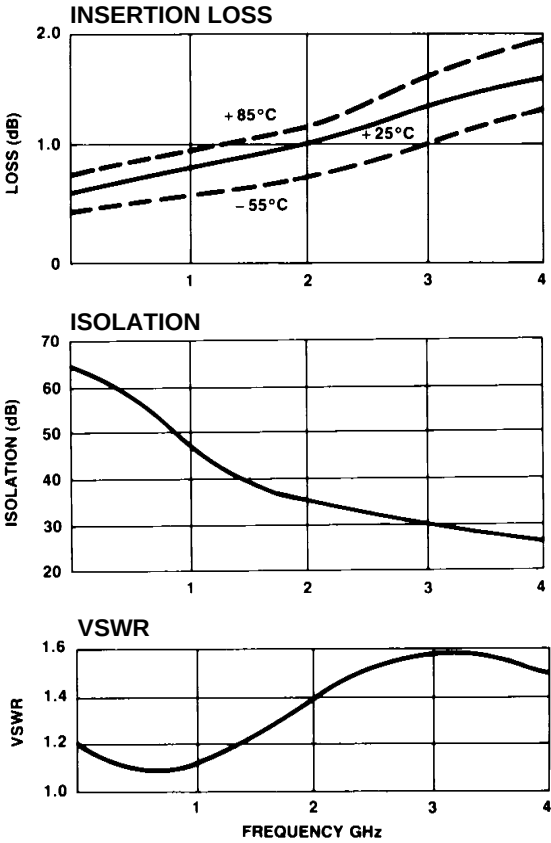
Part No.	Package
SW-207 PIN	Dual Inline

DI-1

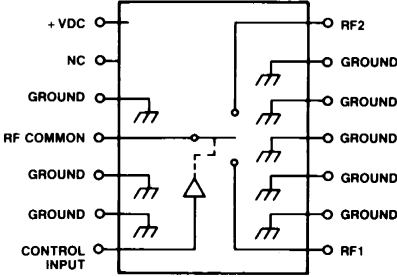


Dimensions in () are in mm.
Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)
.xx = ±0.02 (.x = ±0.5)
(POSITIVE VOLTAGES ONLY)
WEIGHT (APPROX.): 0.14 OUNCES 4 GRAMS

Typical Performance



Schematic



Truth Table

Control Input	Condition Of Switch	
"1" = Logic High	RF Common To Each RF Port	
TTL	RF1	RF2
0	ON	OFF
1	OFF	ON