



Matched GaAs SPDT Switch

5-3000 MHz

SW-205/206

- High Isolation, 50 dB Typical
- Fast Switching Speed
- Low DC Power Consumption
- Integral TTL (SW-205) or CMOS (SW-206) Driver

Guaranteed Specifications*

(From -55°C to +85°C)

Frequency Range	5-3000 MHz	
Insertion Loss	5-3000 MHz	2.6 dB Max
	5-2000 MHz	2.1 dB Max
	5-1000 MHz	1.6 dB Max
VSWR	5-3000 MHz	2.5:1 Max
	5-2000 MHz	2.0:1 Max
	5-1000 MHz	1.5:1 Max
Isolation	5-3000 MHz	35 dB Min
	5-2000 MHz	40 dB Min
	5-1000 MHz	45 dB Min

Operating Characteristics

Impedance	50 Ohms Nominal	
Switching Characteristics	SW-205	SW-206
	(TTL)	(CMOS)
t_{RISE}, t_{FALL}	7 ns	20 ns Typ
t_{ON}, t_{OFF} (50% CTL to 90/10% RF)	20 ns	40 ns Typ
Transients (In-Band)	70 mV	35 mV Typ

Input Power for 1 dB Compression

Model #'s	SW-205	SW-206	
0.5-4 GHz	+27	+33	dBm Typ
0.05 GHz	+21	+26	dBm Typ

Intermodulation Intercept Point (for two-tone input power up to +13 dBm)

Intercept Points	IP_2	IP_3	
0.5-4 GHz	+68	+46	dBm Typ
0.05 GHz	+62	+40	dBm Typ

Bias Power

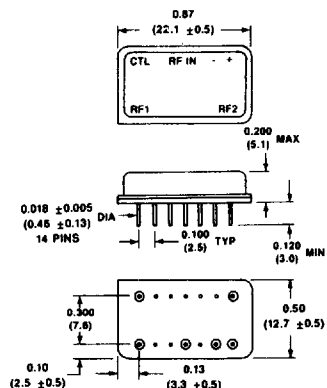
SW-205	+5 VDC @ 1 mA Max
SW-206	+5 to +8 VDC @ 0.150 to 0.400 mA Typ, 1 mA Max

Environmental

See Appendix for MIL-STD-883 screening option.

*All specifications apply when operated with bias voltages of +5 VDC (SW-205) or +8 VDC (SW-206) and 50 ohm impedance at all RF ports.

DI-1



Dimensions in () are in mm.

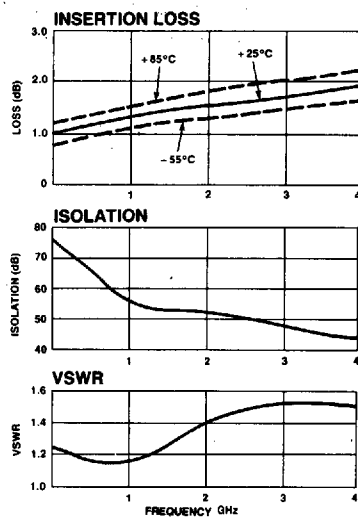
See Appendix for complete physical dimensions.

Ordering Information

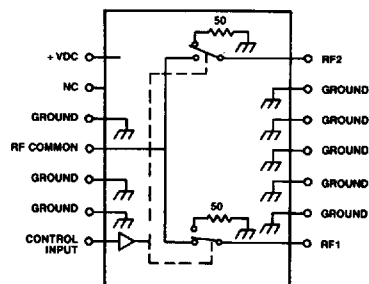
Model No.	Package
SW-205 PIN	Dual Inline
SW-206 PIN	Dual Inline

Specifications Subject to Change Without Notice.

Typical Performance



Schematic



Truth Table

Control Input	Condition Of Switch	
1 ¹ = Logic High	RF Common To	
TTL (SW-205)/CMOS (SW-206)	Each RF Port	
0	RF1	RF2
1	ON	OFF
	OFF	ON

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