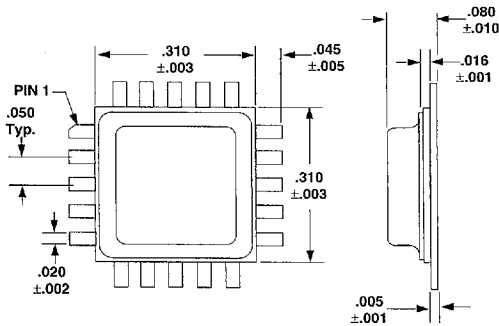


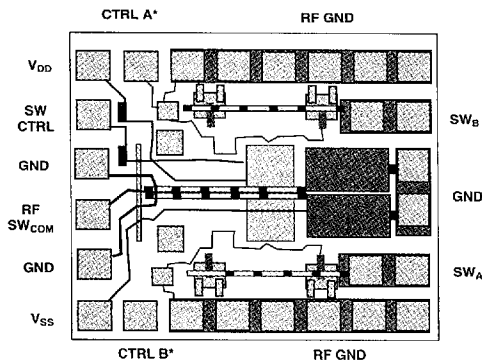
## FEATURES

- DC- 10GHz Broad Bandwidth
- Internal Switch Driver
- Insertion Loss 1.5 dB
- Isolation 45 dB
- Available as die, part # DSW24051D, also available in plastic, part # DSW25251P.

SP2T

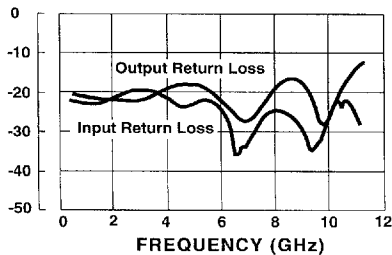
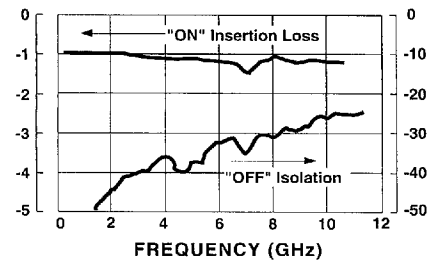


DIE DIAGRAM (53 X 43 MILS, 7 MILS THICK)



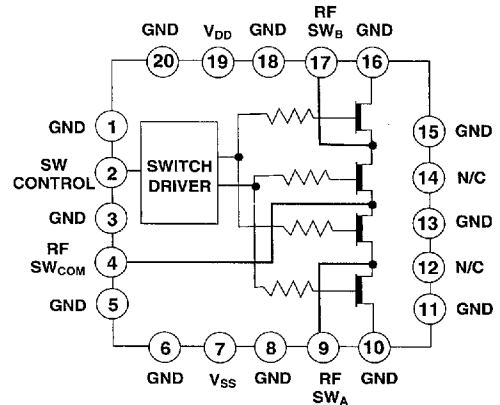
\* OPTIONAL ACCESS TO SWITCH DRIVE

## TYPICAL PERFORMANCE



MODEL NO.  
DSW25151

Reflective Switch with Driver



## PIN FUNCTION

PIN NAME	PIN#	DESCRIPTION
SW Control (TTL)	2	Switch Control: TTL logic Input
RF SW <sub>COM</sub>	4	Common RF input; DC-coupled
V <sub>SS</sub>	7	V <sub>SS</sub> : Negative supply voltage
RF SW <sub>A</sub>	9	RF input A; DC-coupled, "ON" for a logic LOW applied to SW Control
N/C	12	No Connect
N/C	14	No Connect
RF SW <sub>B</sub>	17	RF input B; DC-coupled, "ON" for a logic HIGH applied to SW Control
V <sub>DD</sub>	19	V <sub>DD</sub> : Positive supply voltage
GND (1)	(1)	Ground

Note: (1.) GND Pins are 1, 3, 5, 6, 8, 10, 11, 13, 15, 16, 18, 20

AC COUPLING MAY BE REQUIRED FOR YOUR APPLICATION

## ABSOLUTE MAXIMUM RATINGS

PARAMETER	MIN	TYP	MAX	UNITS
DC POWER SUPPLY			±7	V
OPERATING TEMPERATURE	-55		+85	°C
STORAGE TEMPERATURE	-55		+150	°C
POWER DISSIPATION			1.0	W

## SWITCH LOGIC

SW CTRL	RF SW <sub>A</sub>	RF SW <sub>B</sub>
LOW	ON	OFF
HIGH	OFF	ON

## ELECTRICAL SPECIFICATIONS

T<sub>A</sub>=25°C, V<sub>DD</sub>=+5V, V<sub>SS</sub>=-5V

PARAMETER	MIN <sup>(1)</sup>	TYP	MAX <sup>(1)</sup>	UNITS
FREQUENCY OF OPERATION	DC		10	GHz
INSERTION LOSS		1.5	3.0	dB
ISOLATION - 1 GHz	40	45		dB
ISOLATION - 10 GHz	18	25		dB
INPUT THIRD-ORDER INTERCEPT <sup>(2)</sup>		+35		dBm
INPUT/OUTPUT VSWR		2:1		
DC SUPPLY CURRENT @ ±5V		15	20	mA
POSITIVE SUPPLY	4.5	5	5.5	V
NEGATIVE SUPPLY	-4.5	-5	-5.5	V
INPUT LOGIC LOW		1.0		V
INPUT LOGIC HIGH		3.0		V

NOTE: 1. MIN/MAX VALUES LISTED ARE PRODUCTION TESTED  
2. IP<sub>3</sub> DECREASES BELOW 1GHz