

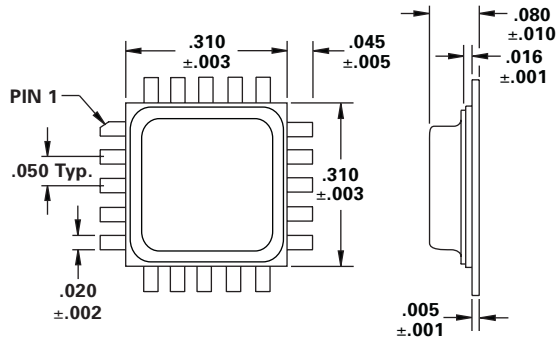
FEATURES

- DC - 10 GHz Broad Bandwidth
- Internal Switch Driver
- Insertion Loss 1.5 dB
- Isolation 45 dB
- Available as die, part # DSW24071D, also available in plastic, part # DSW25251P

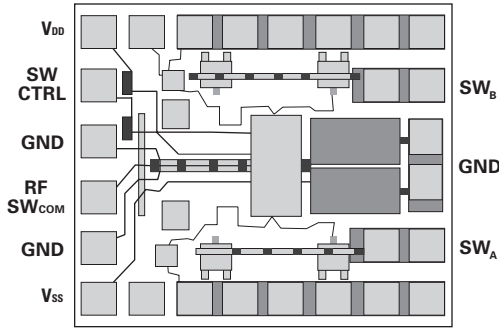


MODEL NO. DSW25151

Reflective Switch with Driver

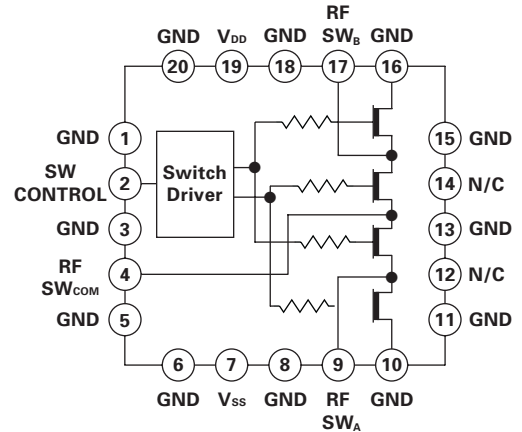
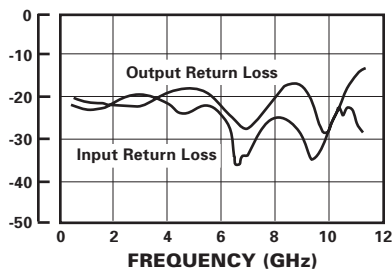
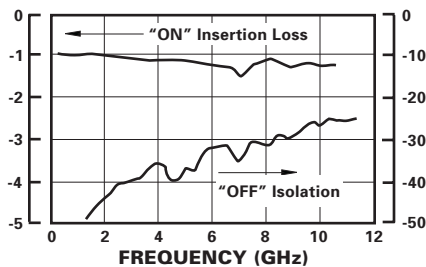


DIE DIAGRAM (53 X 43 MILS, 7 MILS THICK)
CTRL A RF GND



CTRL B RF GND
* Optional Access to Switch Drive

TYPICAL PERFORMANCE at 25°C



PIN FUNCTION

Pin Name	Pin#	Description
SW Control (TTL)	2	Switch Control: TTL logic input
RF SW _{COM}	4	Common RF input; DC-coupled
V _{SS}	7	V _{SS} ; Negative supply voltage
RF SW _A	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 _B	17	RF input B; DC-coupled, "ON" for a logic HIGH applied to SW Control
V _{DD}	19	V _{DD} ; Positive supply voltage
GND	(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 _A	RF SW _B
Low	On	Off
High	Off	On

ELECTRICAL SPECIFICATIONS

T_A = 25°C, V_{DD} = +5V, V_{SS} = -5V

Parameter	Min ⁽¹⁾	Typ	Max ⁽¹⁾	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 ⁽²⁾		+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. IP3 Decreases Below 1 GHz