

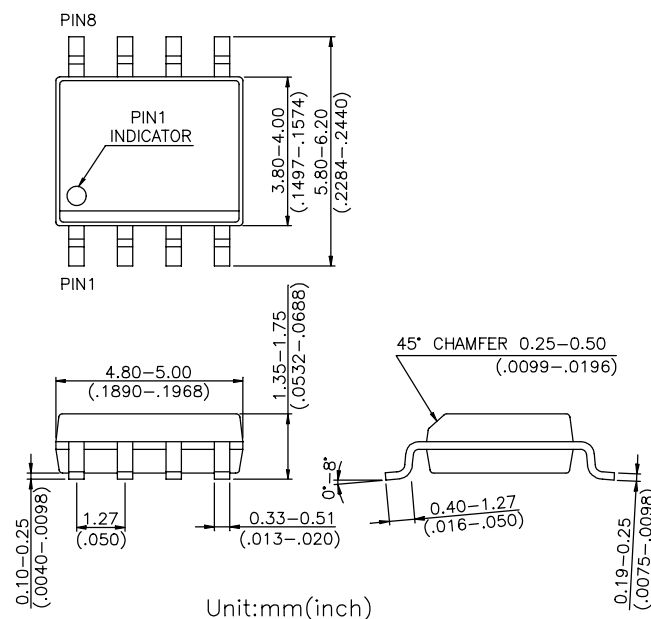
Features

- **Low Insertion Loss:** 0.6dB @ 2GHz
- **High Isolation:** 33dB @ 2GHz
- **P1dB:** +30dBm Typical @ -5V
- **IP3:** 48dBm
- **Low DC Power Consumption**
- **Low Cost SOP-8 Plastic Package**

Description

The HWS332 is a GaAs MMIC SPDT terminated switch in a low cost SOP-8 plastic package. The HWS332 features low insertion loss and high isolation with very low DC power consumption. Typical applications include radio and cellular equipments.

SOP-8



Electrical Specifications at 25°C with 0, -5V Control Voltages

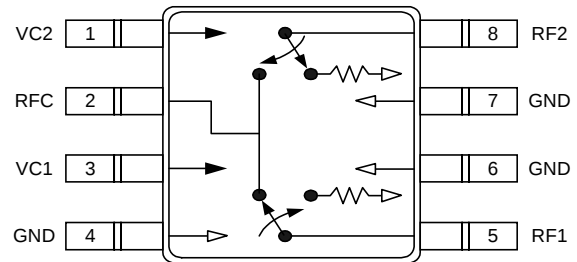
Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Insertion Loss	DC-1.0GHz		0.5	0.7	dB
	DC-2.0GHz		0.6	0.8	dB
	DC-2.5GHz		0.7	0.9	dB
Isolation	DC-1.0GHz	36	42		dB
	DC-2.0GHz	30	33		dB
	DC-2.5GHz		27		dB
VSWR	DC-2.5GHz		1.2:1		
Input Power for One dB Compression	0.5-2.5GHz		30		dBm
3rd Order Intermodulation Intercept Point (IP3)	0.5-2.5GHz (for two-tone input power up to +5dBm)		48		dBm
Switching Time			50		ns
Control Current			30	200	μA

Note: All measurements made in a 50Ω system with 0/-5V control voltages, unless otherwise specified.

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	
0.05GHz	+27dBm
0.5-2.5GHz	+34dBm
Control Voltage	+0.2V, -8.5V
Operating Temperature	-40°C to +85°C
Storage Temperature	-65°C to +150°C

Pin Out



Truth Table

VC1	VC2	RFC-RF1	RFC-RF2
1	0	Insertion Loss	Isolation
0	1	Isolation	Insertion Loss

'0' = 0 to -0.2V @ 20μA max.

'1' = -5V @ 30μA typical to -8V @ 700μA max.

Typical Performance at +25°C

