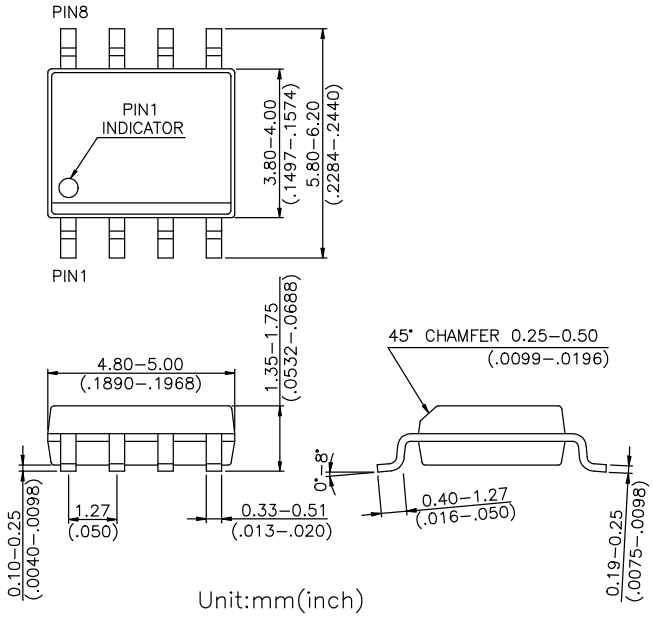
Features

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

SOP-8



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.

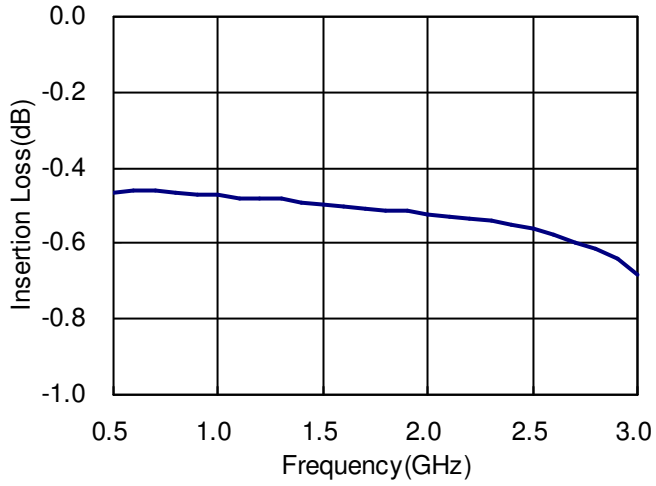
Electrical Specifications at 25℃ with 0, -5V Control Voltages

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Insertion Loss	DC-1.0 GHz DC-2.0 GHz DC-2.5 GHz		0.5 0.6 0.7	0.7 0.8 0.9	dB dB dB
Isolation	DC-1.0 GHz DC-2.0 GHz DC-2.5 GHz	36 30	42 33 27		dB dB dB
Return Loss	DC-2.5 GHz		20		dB
Input Power for One dB Compression	0.5-2.5 GHz		30		dBm
Input Third Order Intermodulation Intercept Point	+5 dBm Per Tone @ 0.5-2.5 GHz		48		dBm
Switching Time			50		ns
Control Current			30	200	uA

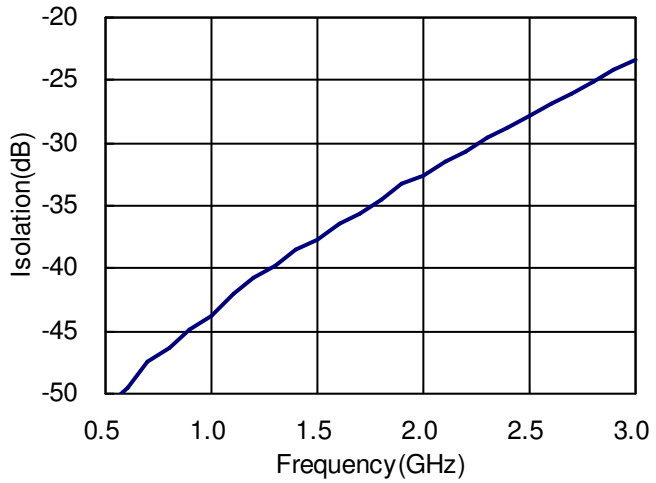
Note: All measurements made in a 50 ohm system with 0/-5V control voltages, unless otherwise specified.

Typical Performance Data @ +25℃

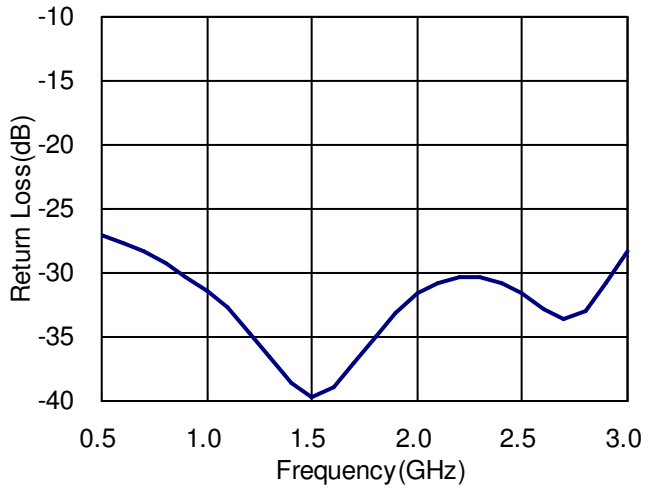
Insertion Loss vs Frequency



Isolation vs Frequency



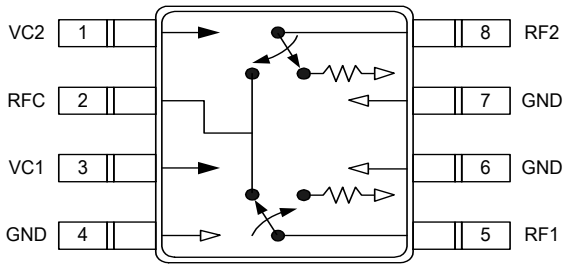
Return Loss vs Frequency



Absolute Maximum Ratings

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

Pin Out (Top View)



Logic Table for Switch On-Path

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

'0' = 0 to -0.2V @ 20 uA max.
'1'= -5V @ 30 uA typical to -8V @ 700 uA max.