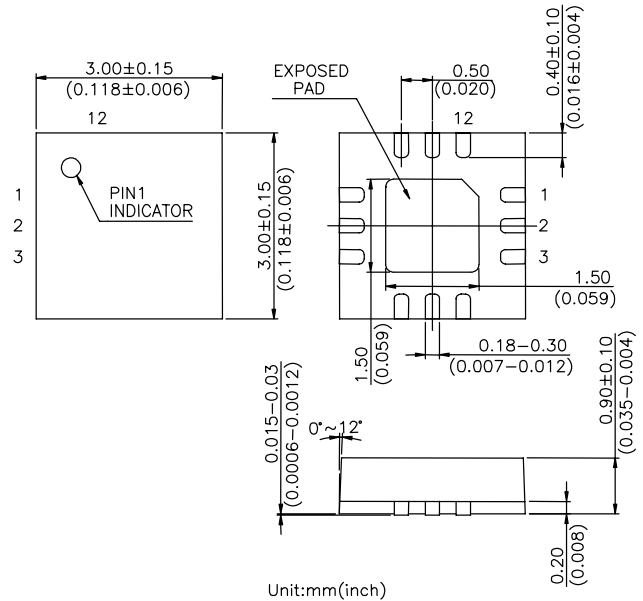


**Features**

- **Low Insertion Loss:** 0.4 dB @ 1.0 GHz  
0.5 dB @ 2.5 GHz
- **Isolation:** 27 dB @ 1.0 GHz  
20 dB @ 2.5 GHz
- **Low DC Power Consumption**
- **Miniature QFN12L (3x3 mm) Plastic Lead (Pb) Free Package**
- **RoHS (Restrict of Hazardous Substances) Compliant**

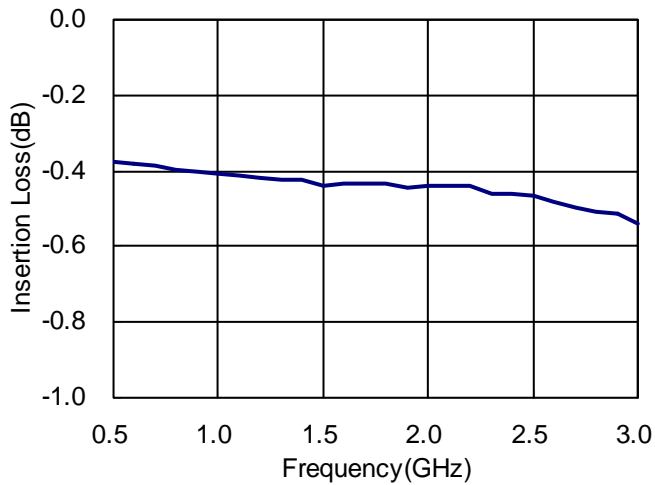
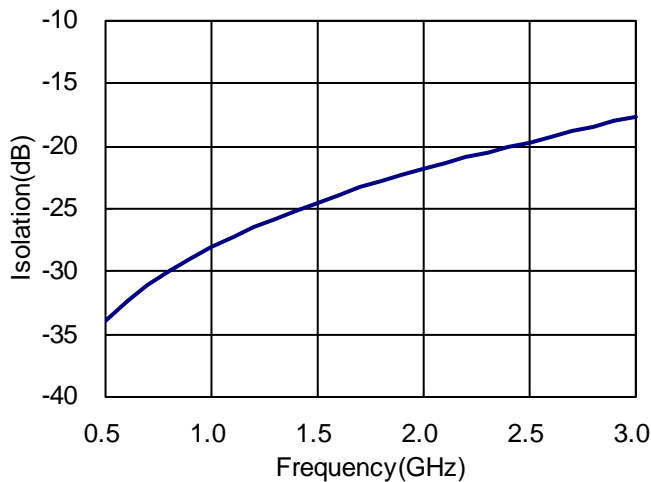
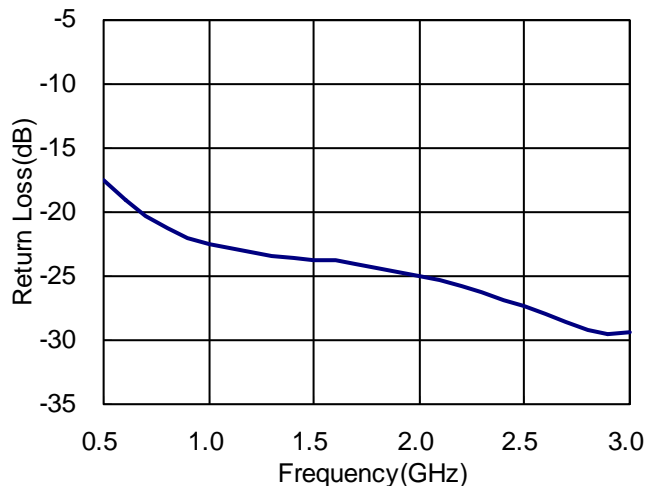
**QFN12L (3 x 3 mm)**

**Description**

The HWS467 is a GaAs SP3T switch operating at 0.5-3.0 GHz in a low cost miniature QFN12L (3 x 3 mm) plastic lead (Pb) free package. The HWS467 features low insertion loss with very low DC power consumption. This switch can be used in wireless applications for selection of Bluetooth and IEEE 802.11b/g transmit/receive functions.

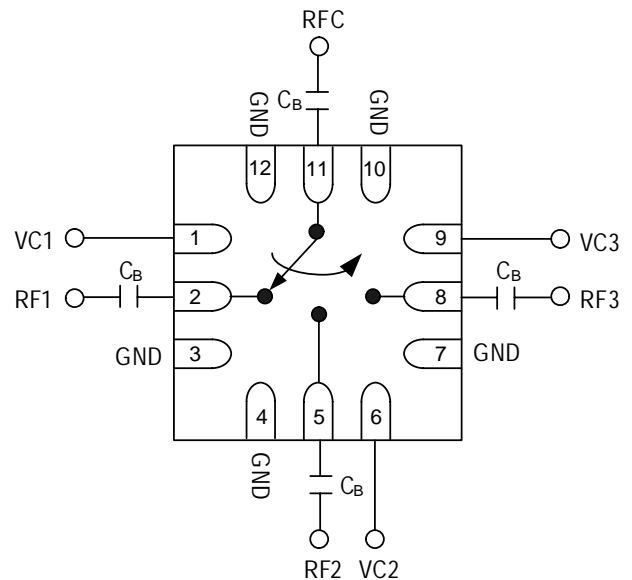
**Electrical Specifications at 25°C with 0, +3V Control Voltages**

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Insertion Loss	0.5-1.0 GHz		0.40		dB
	1.0-2.3 GHz		0.45		dB
	2.3-2.7 GHz		0.55	0.70	dB
	2.7-3.0 GHz		0.60	0.80	dB
Isolation	0.5-1.0 GHz		27		dB
	1.0-2.3 GHz		20		dB
	2.3-2.7 GHz	15	20		dB
	2.7-3.0 GHz	15	17		dB
Return Loss	0.5-3.0 GHz		15		dB
Input Power for 0.1 dB Compression	0.5-3.0 GHz		33		dBm
Input Power for One dB Compression	0.5-3.0 GHz		36		dBm
Switching Time			100		nsec
Control Current			5	100	uA

Note: All measurements made in a 50 ohm system with 0/+3.0V control voltages, unless otherwise specified.

**Typical Performance Data @ +25°C**
**Insertion Loss vs Frequency**

**Isolation vs Frequency**

**Return Loss vs Frequency**

**Absolute Maximum Ratings**

Parameter	Absolute Maximum
RF Input Power	+36 dBm @ +3V
Control Voltage	+6V
Operating Temperature	-40°C to +85°C
Storage Temperature	-65°C to +150°C
Electrostatic Discharge Machine Model	Class M1

**Pin Out (Top View)**

**Note:**

- DC blocking capacitors  $C_B=47\text{pF}$  are required on all RF ports.
- Exposed pad in the bottom must be connected to ground by via holes.

**Logic Table for Switch On-Path**

VC1	VC2	VC3	RF
1	0	0	RF1
0	1	0	RF2
0	0	1	RF3

'1' = +2.7V to +5V  
'0' = 0V to +0.2V