

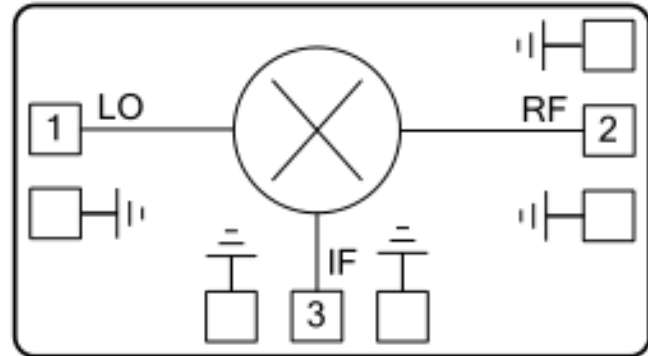
### Features

- **Passive Type:** No DC biasing required
- **RF Frequency:** 6-26GHz
- **IF Bandwidth:** DC-12GHz
- **Conversion Loss:** 10 dB
- **LO/RF Isolation:** 30 dB
- **P1dB:** +12 dBm
- **Die Size:** 1.37 x 1.0 x 0.1 mm

### Typical Applications

- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

### Functional Block Diagram



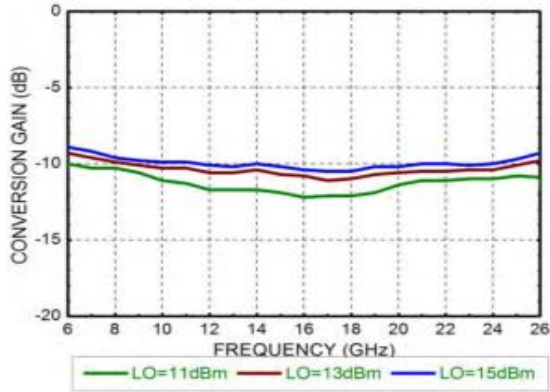
### Electrical Specifications

TA = +25°C, IF = 100MHz, LO = +13dBm

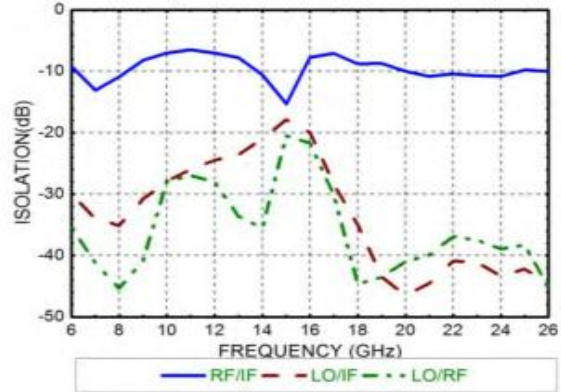
Parameters	Min.	Typ.	Max.	Units
RF Frequency (RF/LO)		6-26		GHz
IF Frequency (IF)		DC-12		GHz
Conversion Loss		10		dB
Isolation "LO to RF"		30		dB
Isolation "LO to IF"		30		dB
Isolation "RF to IF"		10		dB
Input 1dB Compression		12		dBm
Input Third Order Intercept (IIP3)		24		dBm



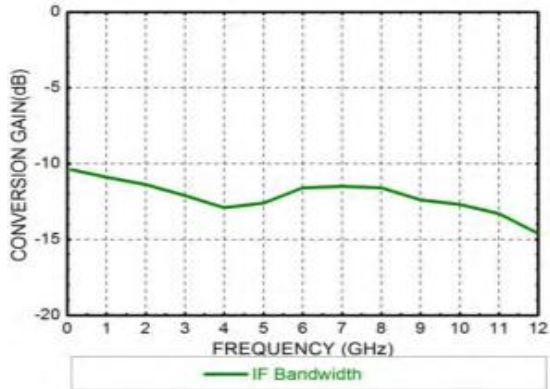
### Conversion Gain vs. LO Drive



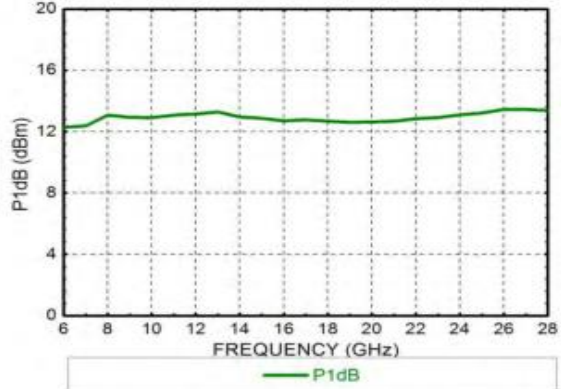
### Isolation



### IF Bandwidth

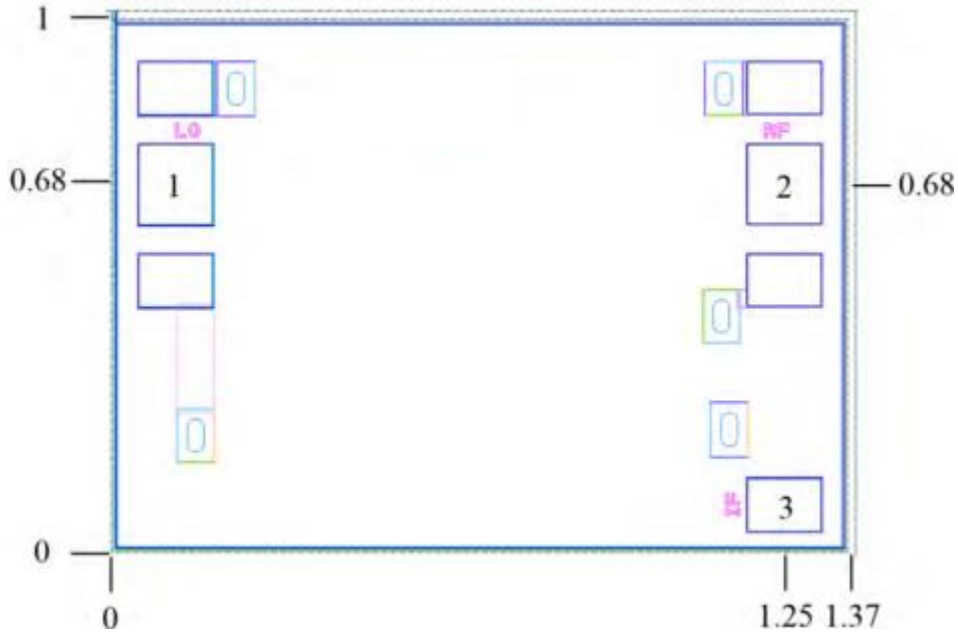


### Input Power P1dB





### Outline Drawing: All Dimensions in mm



### Pad Description

Pad Number	Function	Description
1	LO	DC coupling 50Ω Impedance
2	RF	DC coupling 50Ω Impedance
3	IF	DC coupling 50Ω Impedance
Die bottom	GND	Die bottom must be connected to RF/DC ground.

#### Notes:

1. Die thickness: 100um
2. Typical bond pad is 100\*100 μm<sup>2</sup>
3. Bond pad metalization: Gold
4. Backside metalization: Gold
5. Backside of the die is grounded
6. No connection required for unlabeled bond pads

#### Maximum Ratings:

1. RF/IF input power: +24dBm
2. Local oscillator drive power: +24dBm
3. Storage temperature: -65°C to +150°C
4. Operating temperature: -55°C to +85°C