

Features

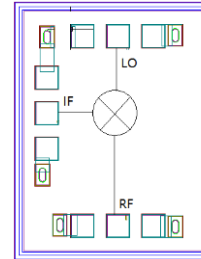
LO-RF Isolation: 41dB

Frequency Conversion Loss: 9dB

IF Bandwidth: DC-18GHz

Chip Size: 800×1050μm

Functional Diagram



General Description

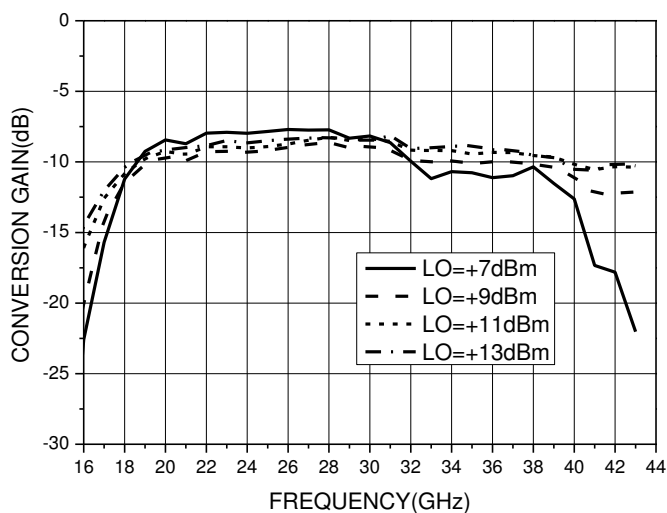
MWM011 is a mixer designed and manufactured using the GaAs pHEMT process. This product can achieve up-conversion or down-conversion function in the 18-43GHz band, the IF bandwidth is DC-18GHz, and the conversion loss is less than 9dB.

Electrical Specifications, TA = +25°C, (LO= +13dBm)

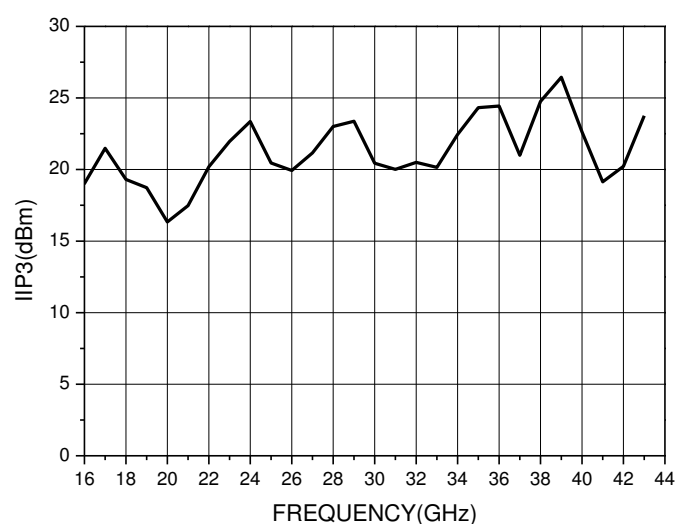
Parameter	Min	Typ	Max	Units
RF Bandwidth	18		43	GHz
LO Bandwidth	18		43	GHz
IF Bandwidth	DC		18	GHz
Frequency Conversion Loss		9		dB
LO-RF Isolation		41		dB
LO-IF Isolation		32		dB
RF-IF Isolation		17		dB

Test Results

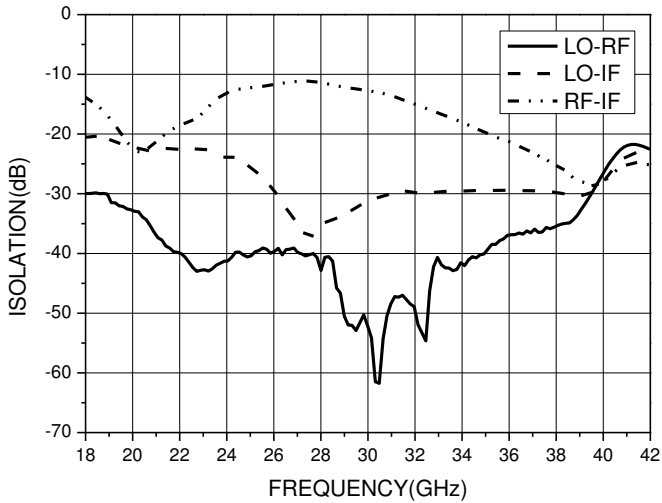
Conversion Loss



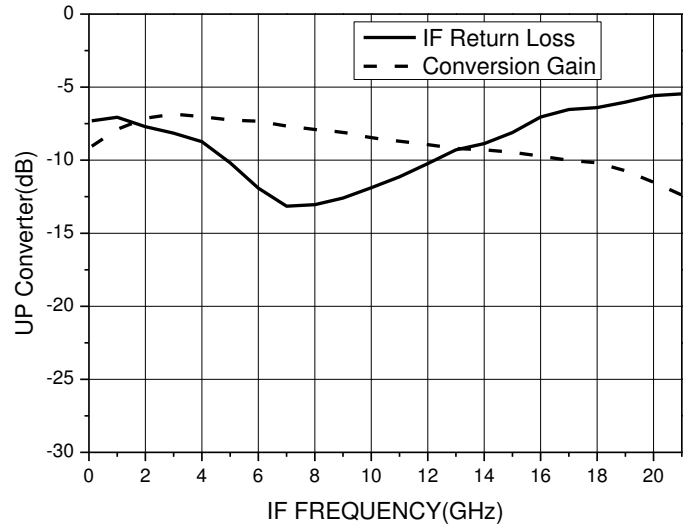
Input IP3



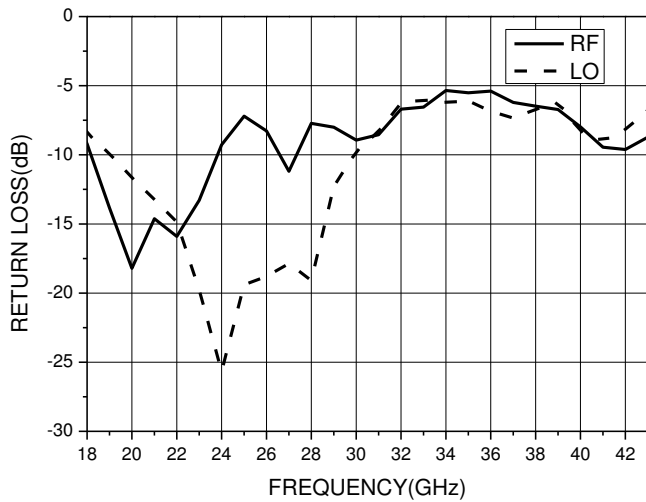
LO/IF、RF/IF、 LO/RF Isolation



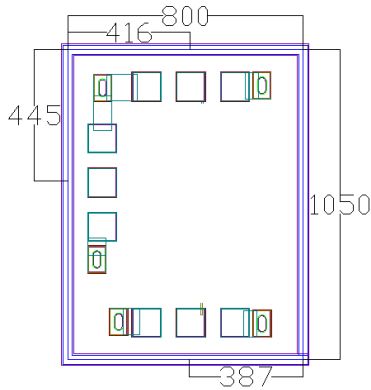
IF Bandwidth@LO=13dBm



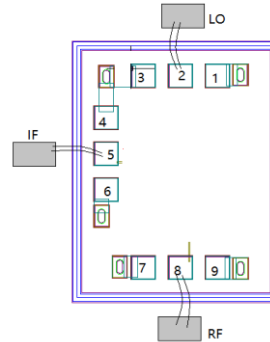
RF/LO Return Loss



Chip Size (Unit: μm)



Assembly Diagram



Pin Description

Pin Number	Features	Description
1、3、4、6、7、9	GND	Connect to RF/DC ground
8	RF	This pin is matched to 50 Ohms
2	LO	This pin is DC coupled and matched to 50 Ohms
5	IF	This pin is matched to 50 Ohms

Absolute Maximum Ratings

RF Input	+ 25dBm
LO Input	+ 23dBm
Storage Temperature	-65 - +150°C
Operating Temperature	-55 - +85°C