

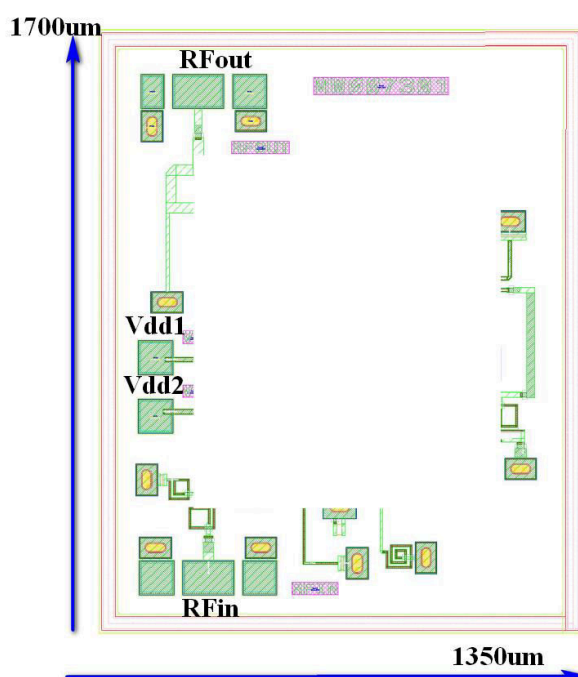
General Description

The MWX006 is a x2 active broadband frequency multiplier chip utilizing GaAs PHEMT technology. When driven by a 0dBm signal, the multiplier provides +18dBm typical output power from 24 to 40 GHz.

Features

- High Pout: +18dBm
- Low Drive Power: 0dBm to + 3dBm
- Fo Isolation: > 35dBc @ 24 GHz
- Supply Current: +5 V@90 mA
- Size: 1.35 x 1.7 x 0.1 mm

Functional Diagram (Typical bond Pad: 100x150um)



(Die Thickness: 100 um)

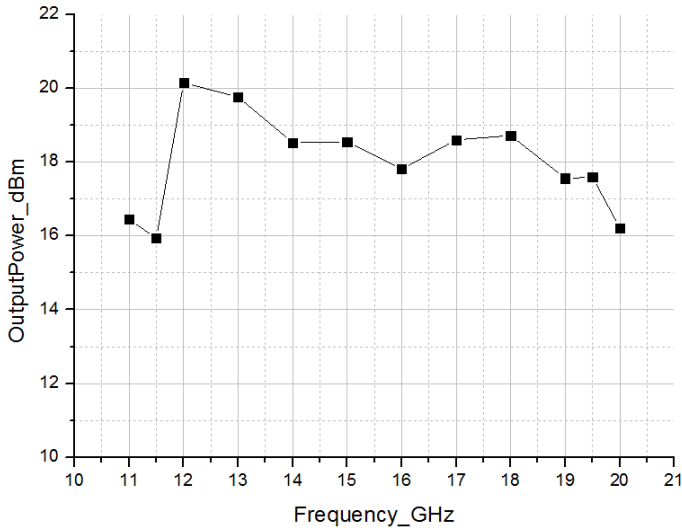
Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{dd} = +5\text{V}$, $P_{in} = +0\text{dBm}$

Parameter	Min	Typ	Max	Units
Frequency Range Input	12		20	GHz
Frequency Range Output	24		40	
Output Power	16	18		dBm
Fo Rejection	20	40		dBc
Third harmonic rejection	20	30		dBc
Supply Current (@Vdd= +5V)		90		mA

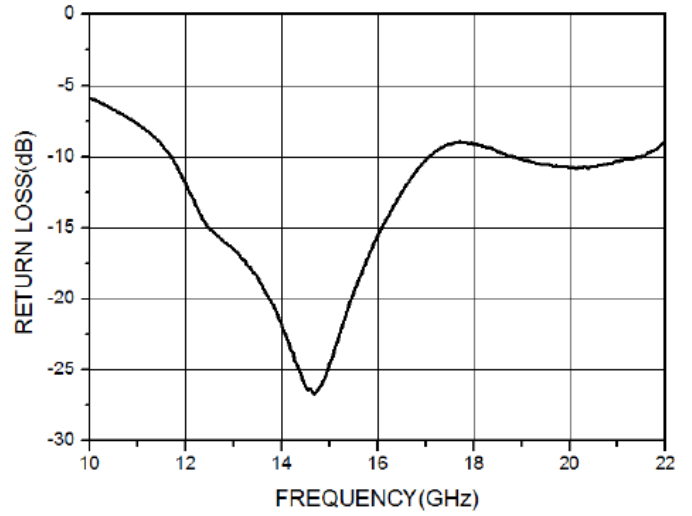


Test Results

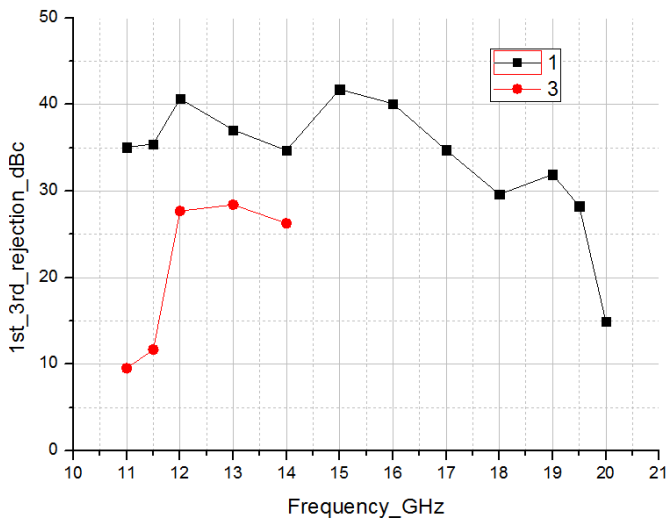
Pout



Input Return Loss



Harmonic Rejection



Assembly Diagram

