

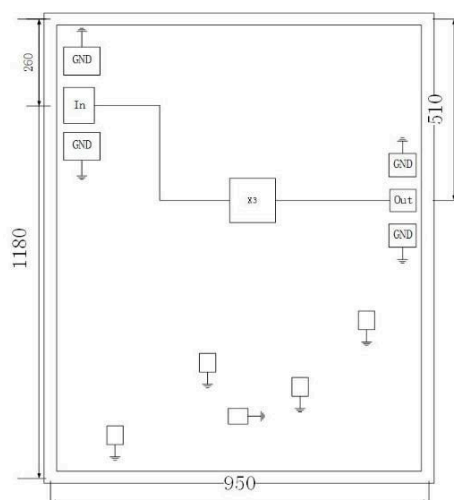
## General Description

The MWX003 is a x3 passive broadband frequency multiplier chip utilizing GaAs PHEMT technology.

## Feature

Conversion Loss: 16dB  
Drive Power: 16dBm  
Chip Size: 0.95 x 1.18 x 0.05 mm

## Functional Diagram (bondpad : 100x130um)



(Die Thickness: 50 um)

## Electrical Specification, TA=+25°C, Pin=+16dBm

Parameter	Min	Typ	Max	Units
Frequency Range Input	17		37	GHz
Frequency Range Output	51		110	GHz
Second output power	-34	-28	-21	dBm
Third output power	-4	-1	2	dBm
Second harmonic rejection	24	30	36	dBc
Conversion Loss		16		dB

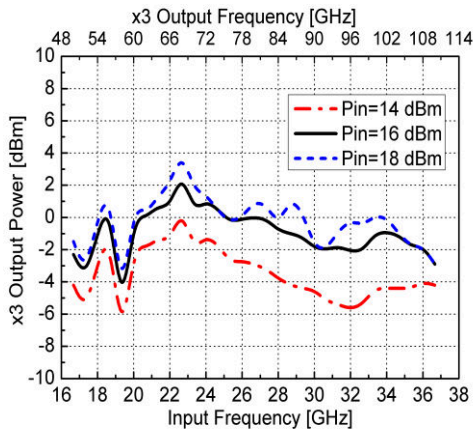
## Absolute Maximum Ratings (TA=25°C)

RF Input Power	21dBm
Storage Temperature	-55 to +150°C
Operating Temperature	-55 to +85°C

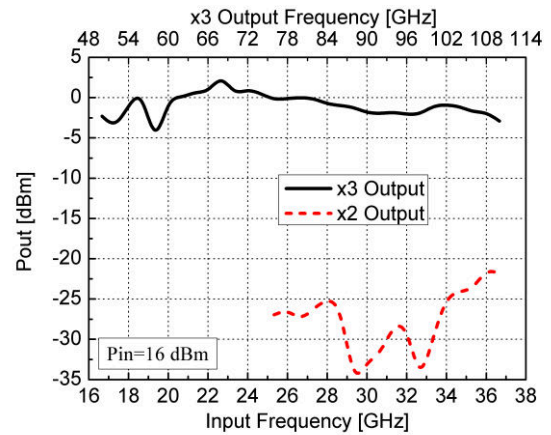


## Test Results

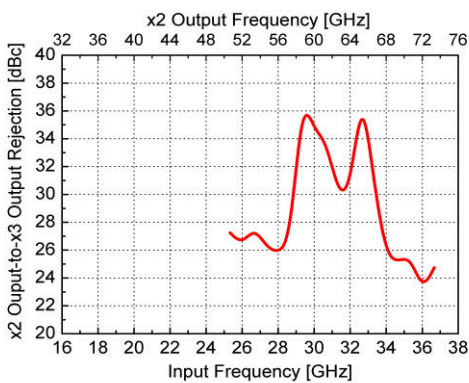
### Pout vs.Pin



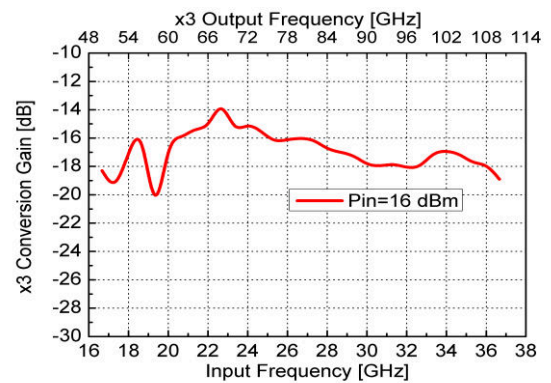
### Pout\_Second and third harmonic



### Second harmonic rejection



### Conversion Loss



## Assembly Diagram

