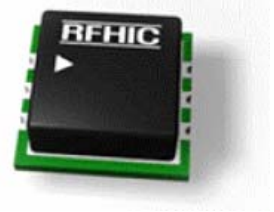


## Product Features

- Integrated Monolithic GaAs MESFET
- Active Mixer Packages Module
- Surface Mount Hybrid Type & Reel Packing
- No matching circuit needed
- Lower Manufacturing Cost
- Higher Productivity and Reliability
- Very Low Noise Figure & Low Distortion

## Application

- Repeater
- Base Station
- RF Sub-Systems



## Description

The IC operates from a positive +5V rail consuming 125 mA of current while only requiring a  $1 \pm 2$  dBm LO drive.

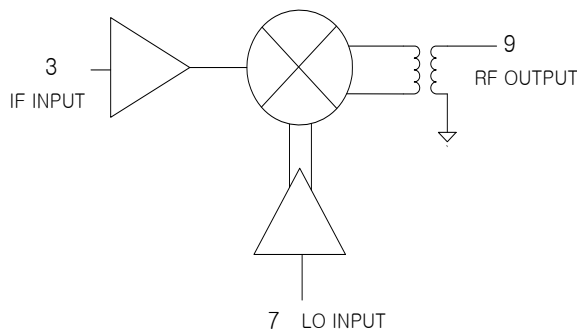
The MCM is implemented with reliable and mature GaAs MESFET technology.

## Specifications (IF70MHz) (Typ.)

(Operating Temperature: -30°C~+70°C)

IF Frequency (MHz)	LO Frequency (MHz)	RF Frequency (MHz)	Conversion Gain (dB)	OIP3 (dBm)	Out P1dB (dBm)	LO to RF leakage (dBm)	IF to RF Leakage (dBm)	Vdd /Idd
50 ~ 200	2130~2430	2200~2450	5	24	8	-15	-65	5V /125mA
		2450~2500	4.5	20				

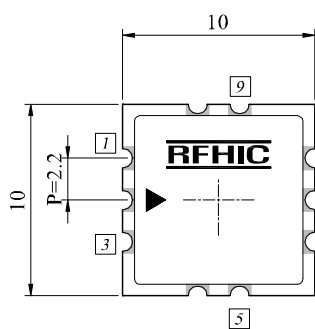
## Functional Diagram



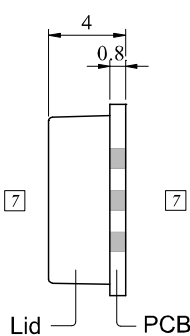
## Functional pin Layout

Pin No.	Function
1 or 5	Vdd+5V
3	IF In
7	LO In
9	RF Out
2,4,6,8,10	Ground

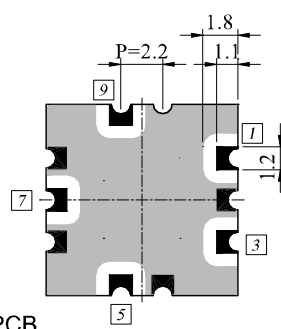
## Dimensions in mm



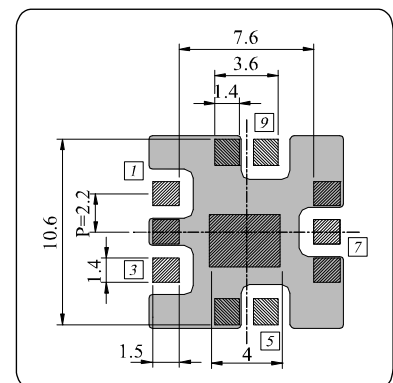
Top View



Side View



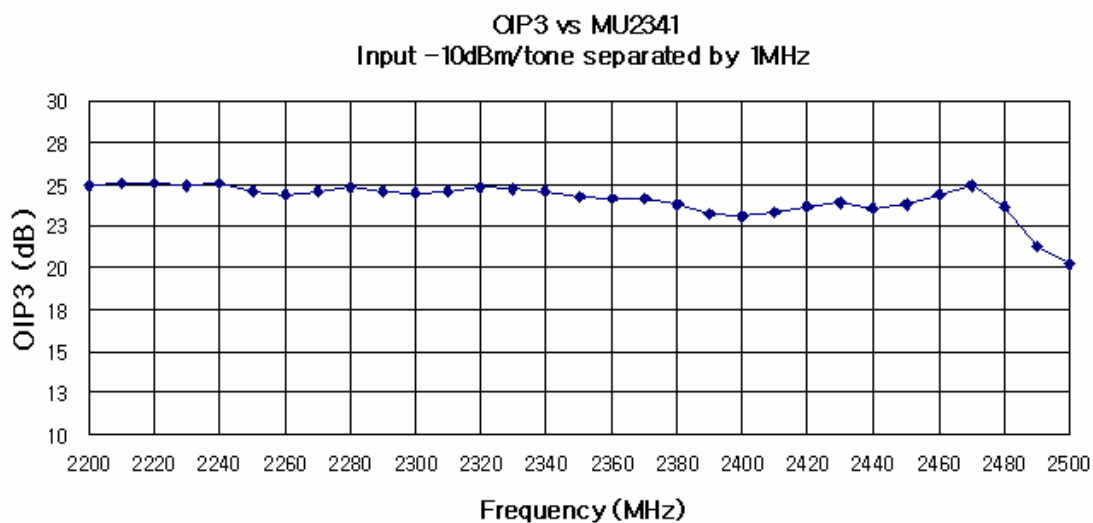
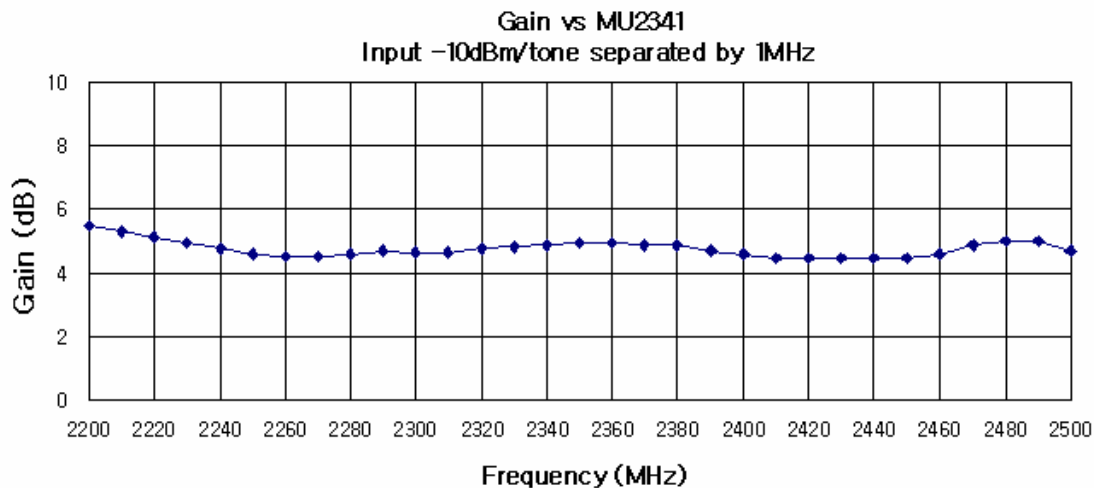
Bottom View



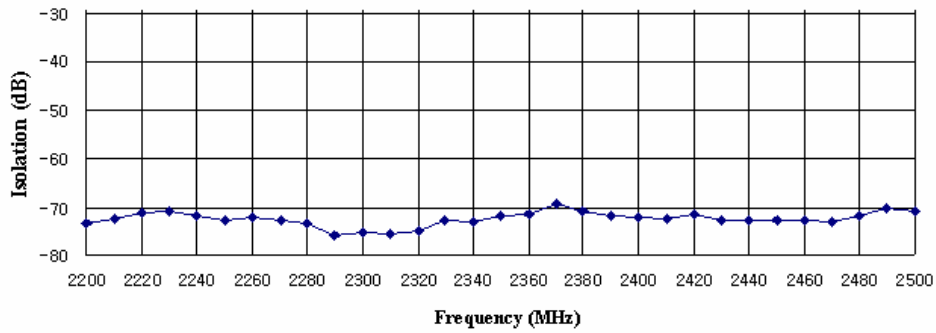
Recommended Pattern

## Typical Performance at 25°C

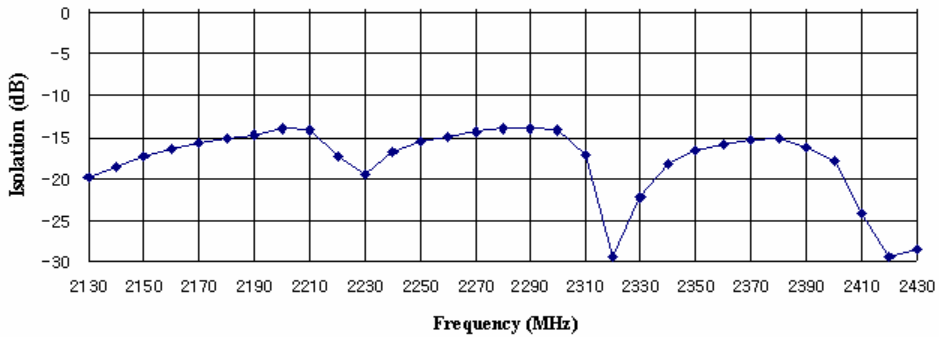
Test Condition: IF = 70MHz@-10dBm, LO = 2230~2430MHz@2dBm, RF = 2200~2500MHz



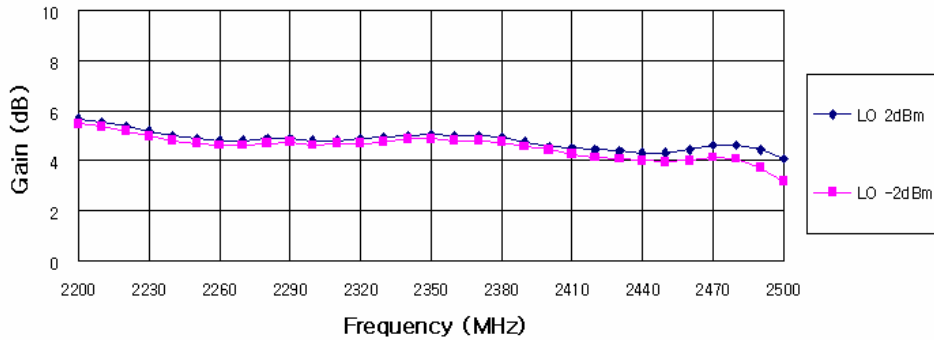
**Isolation of IF to RF**



**Isolation of LO to RF**



**Gain vs LO Drive**  
Input -10dBm/tone separated by 1MHz



**OIP3 vs LO Drive**  
Input -10dBm/tone separated by 1MHz

