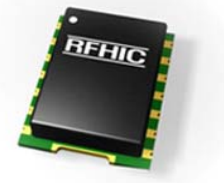


## Product Features

- Integrated Monolithic GaAs Mixer Package Module
- High Reliability
- Lower Manufacturing Cost
- Higher Productivity
- Very Low Noise Figure & Low Distortion

## Application

- Repeater
- Base Station
- RF Sub-Systems



Package Type: HY-2

## Description

The IC operates from a positive +5V rail consuming 145 mA of current while only requiring a  $2 \pm 2$  dBm LO drive. The MCM is implemented with reliable and mature GaAs MESFET technology.

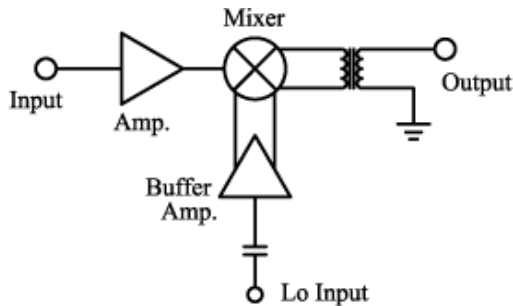
## Specifications

(Operating Temperature:  $-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$ )

Test Conditions :  $T_a=25^{\circ}\text{C}$ ,  $V_{dd}=5\text{V}$ ,  $P_{LO}2\text{dBm}$ ,  $IF=70\text{MHz}$ ,

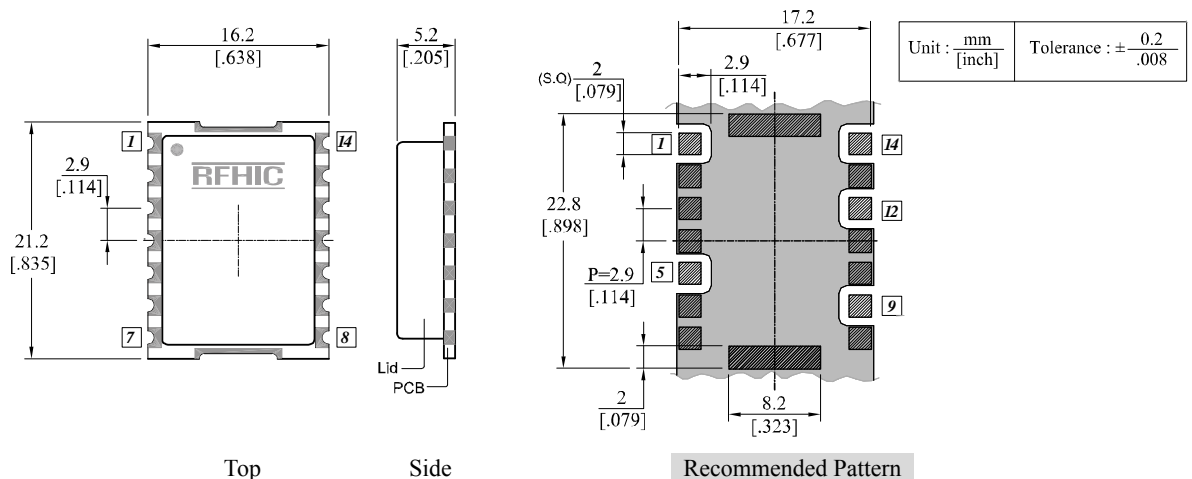
Part Number	RF Frequency (MHz)	IF Frequency (MHz)	Conversion Gain (dB)	IIP3 (dBm)	NF (dB)	Output P1dB (dB)	LO to IF Leakage (dBm)	RF to IF Leakage (dBm)	Vdd/Idd
MD2191	1900~2050	50-200	10	17	8.5	10	-20	-25	5V/145mA
	2050~2200		9	17	8.5	10			

## Functional Diagram

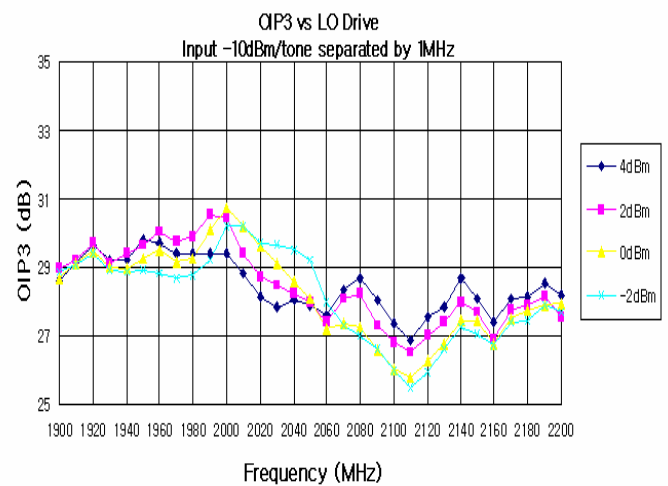
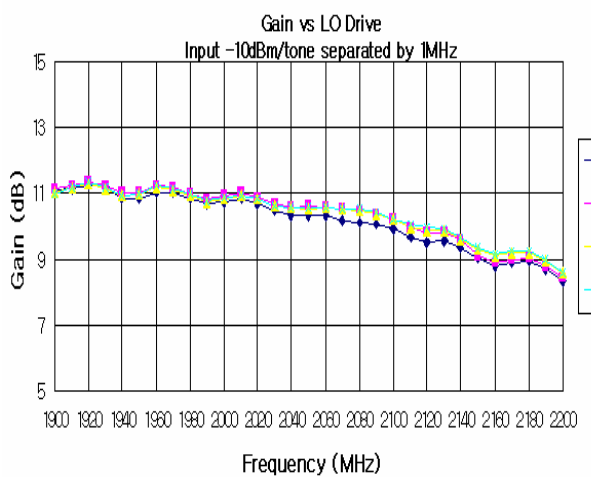
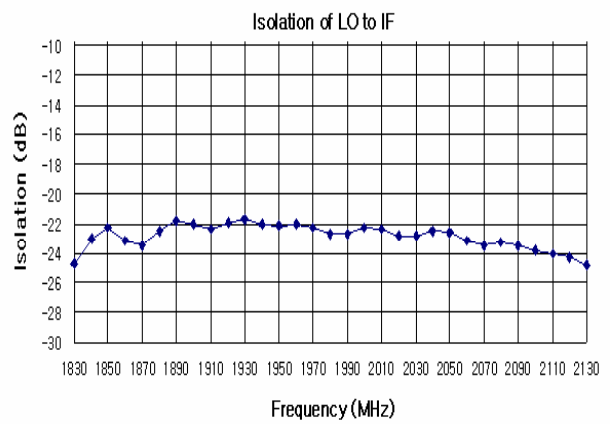
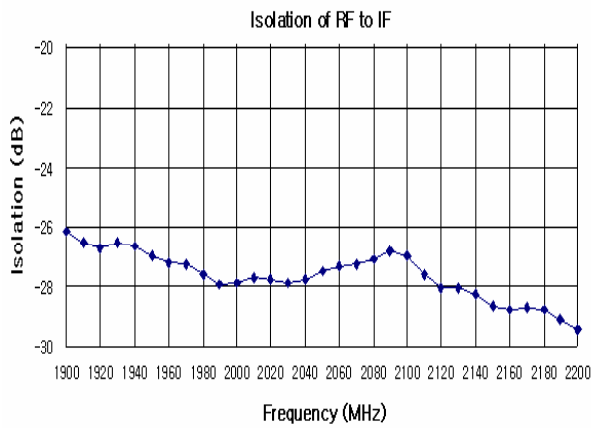
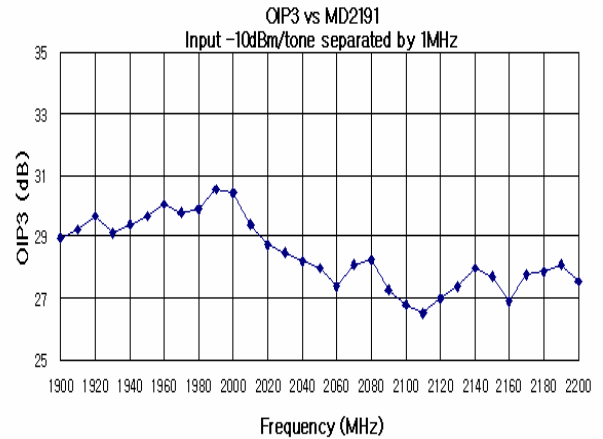
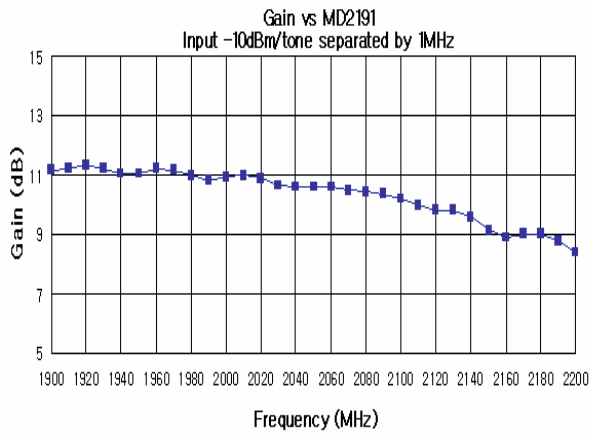


Pin No.	Function
1 or 14	Vdd+5V
5	RF In
9	LO In
12	IF Out
2,3,4,6,7,8,10,11,13	Ground

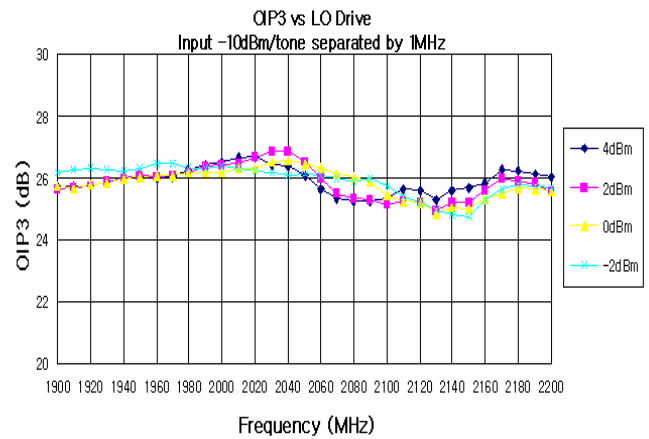
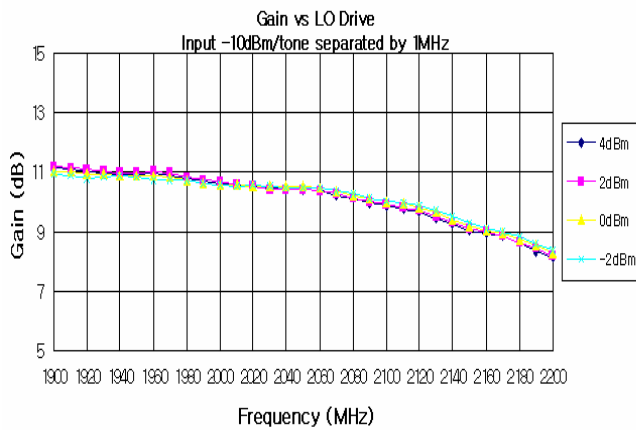
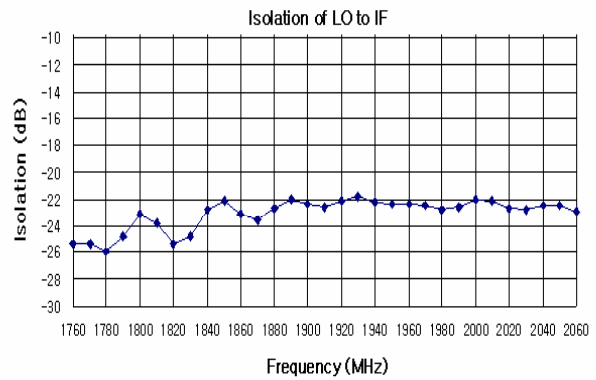
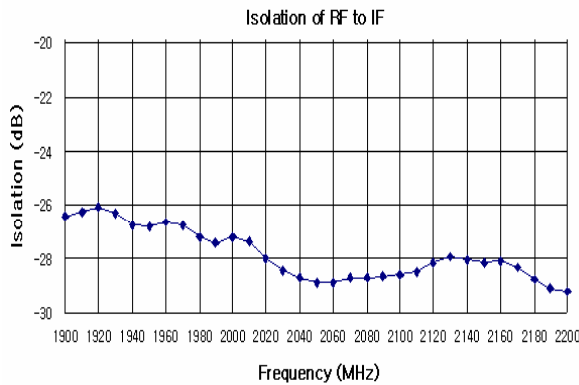
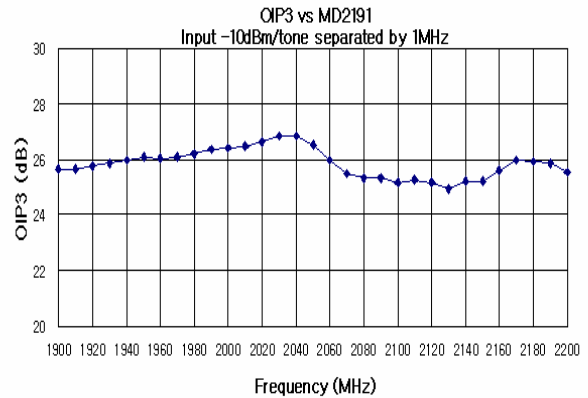
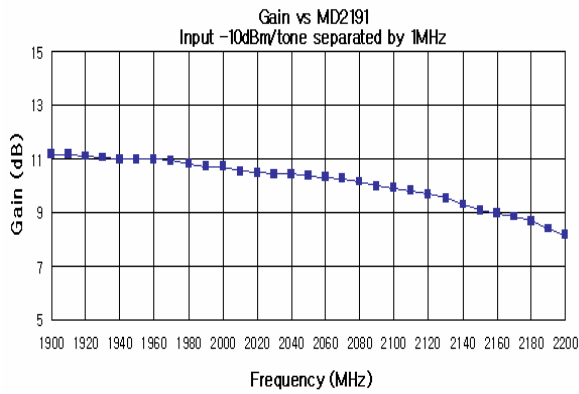
## Package Dimensions (Type: HY-2)



Test Condition: RF = 1900~2200MHz, LO = 1830~2130MHz@2dBm, IF = 70MHz



Test Condition: RF = 1900~2200MHz, LO = 1760~2060MHz@2dBm, IF = 140MHz



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