

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 ± 2 dBm LO drive. The MCM is implemented with reliable and mature GaAs MESFET technology.

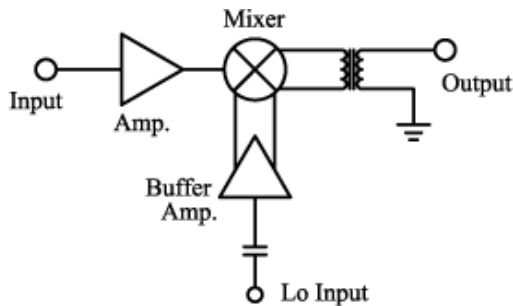
Specifications

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

Part Number	RF Frequency (MHz)	IF Frequency (MHz)	Conversion Gain (dB)	OIP3 (dBm)	IIP3 (dBm)	NF (dB)	Output P1dB (dB)	LO to IF Leakage (dBm)	RF to IF Leakage (dBm)
MD1891	1700~1820	50~200	10	26	16	8.5	10	-16	-20
	1820~1920		9	26	17				

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

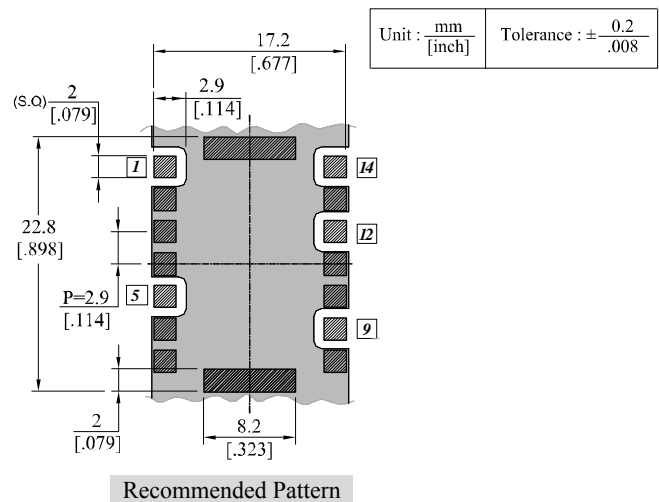
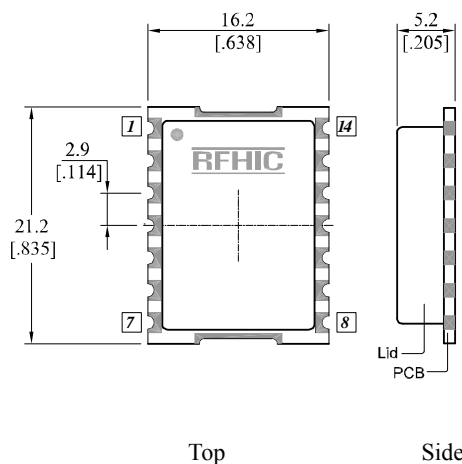
Functional Diagram



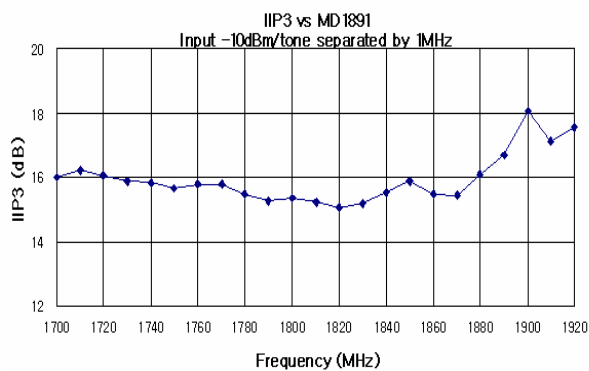
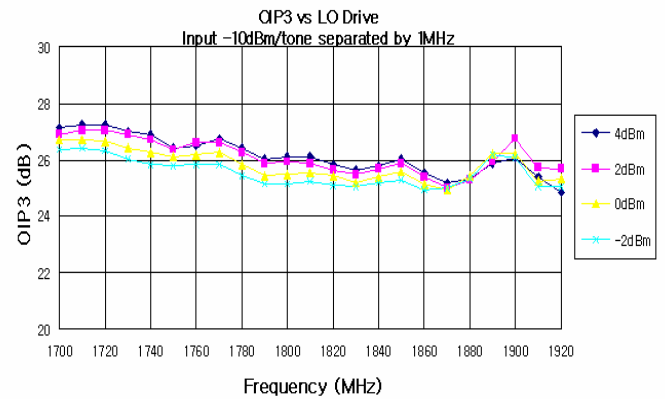
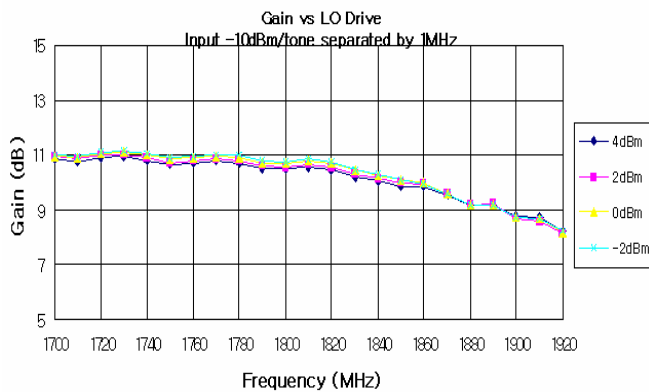
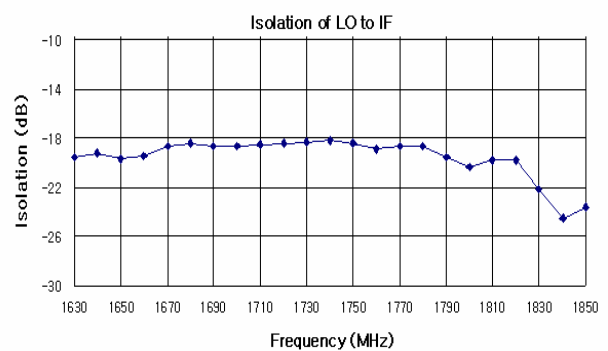
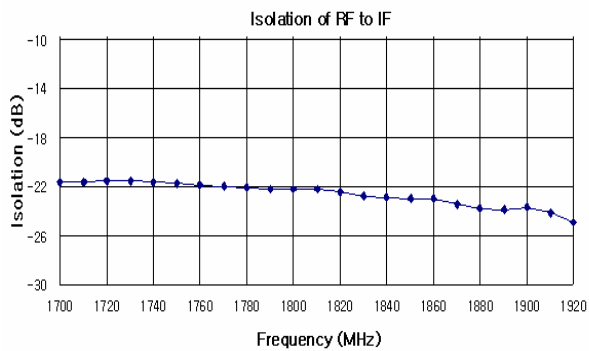
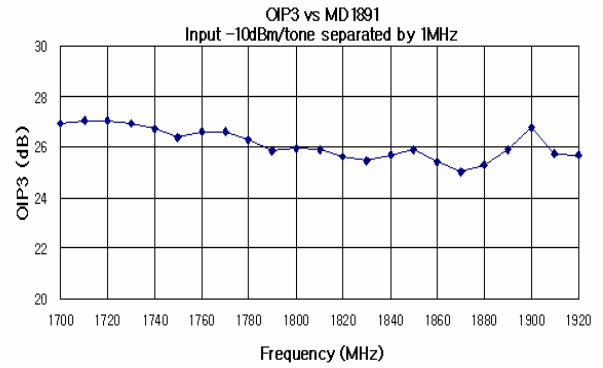
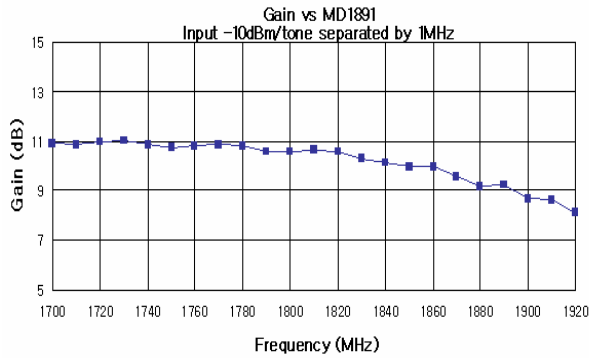
Functional Pin Layout

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

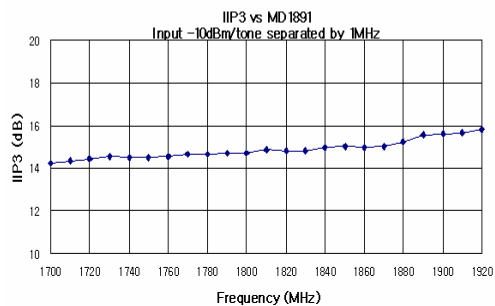
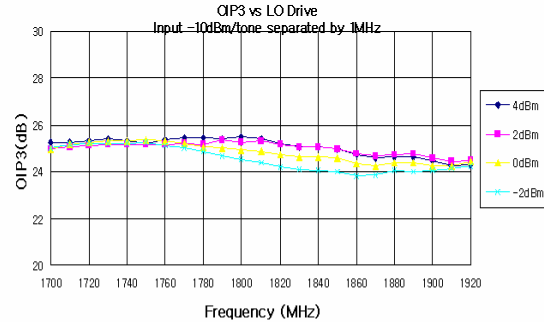
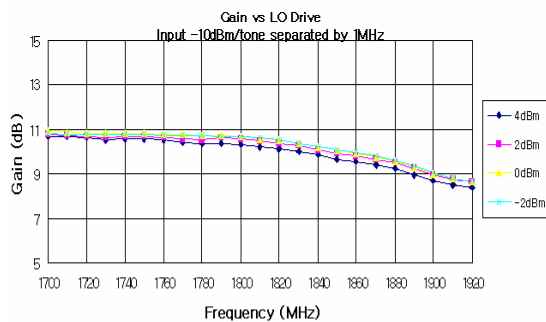
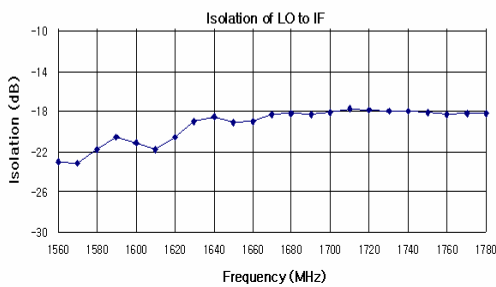
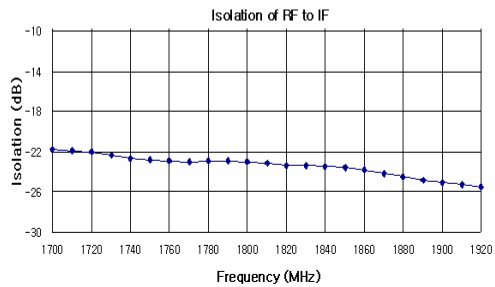
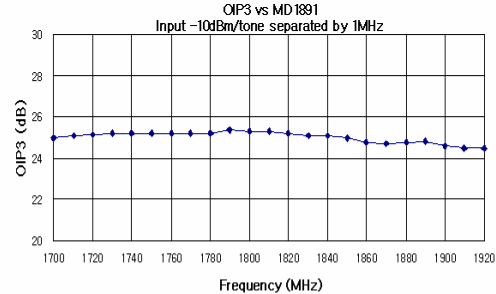
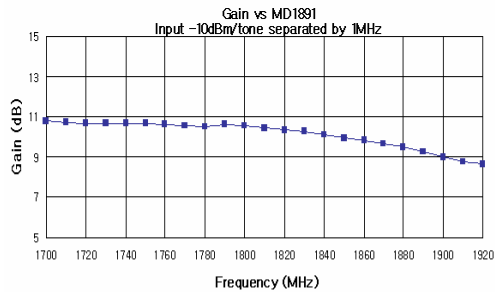
Package Dimensions (Type: HY-2)



Test Condition: RF = 1700~1920MHz, LO = 1630~1850MHz@2dBm, IF = 70MHz



Test Condition: RF = 1700~1920MHz, LO = 1560~1780MHz@2dBm, IF = 140MHz



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