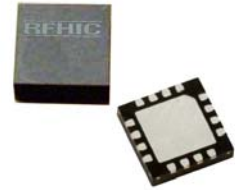


Product Features

- Integrated Monolithic GaAs MESFET
- Active Mixer Packages Module
- Pb-free 3mm 16-pin QFN package
- Lower Manufacturing Cost
- Higher Productivity and Reliability
- Very Low Noise Figure & Low Distortion

Application

- Repeater
- Base Station



Package Type: QFN-3

Description

The IC operates from a positive +5V rail consuming 145 mA of current while only requiring a 2 dBm LO drive.

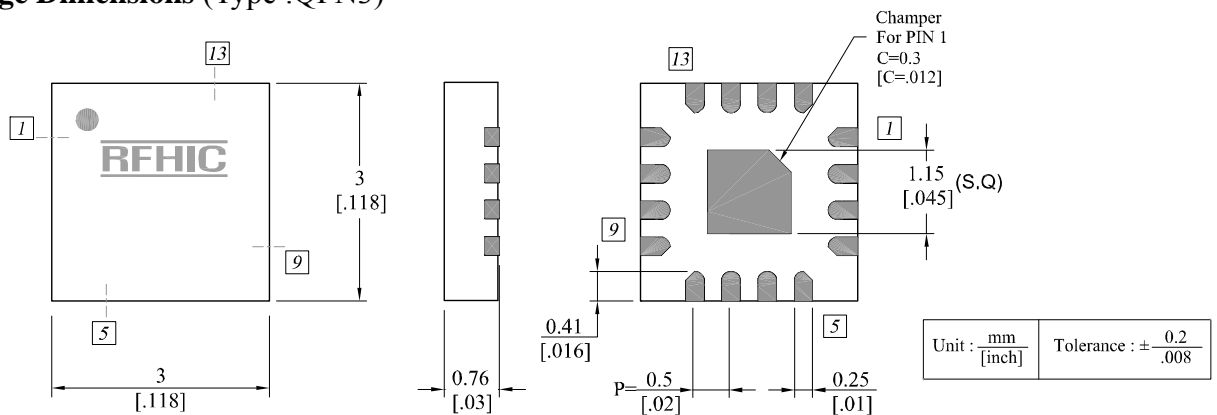
The MCM is implemented with reliable and mature GaAs MESFET technology.

Specifications (Typical performance)

(Operating Temperature: -30°C~+80°C)

RF Frequency (MHz)	LO Frequency (MHz)	IF Frequency (MHz)	Conversion Gain (dB)	OIP3 (dBm)	LO to IF Leakage (dBm)	RF to IF Leakage (dBm)	Vdd/Idd
836	766	70	11	28	-15	-20	5V/145mA
1850	1780		10	25	-20	-20	5V/145mA
2140	2070		6	25	-20	-20	5V/145mA
3500	3430		0	20	-20	-25	5V/145mA

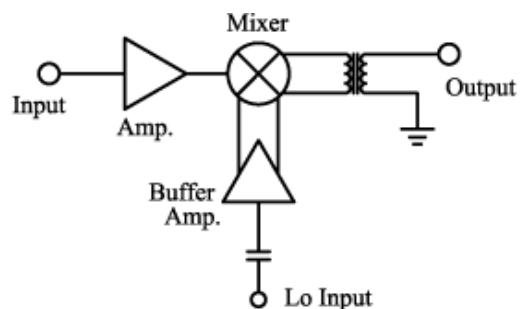
Package Dimensions (Type :QFN3)



Functional Pin Layout

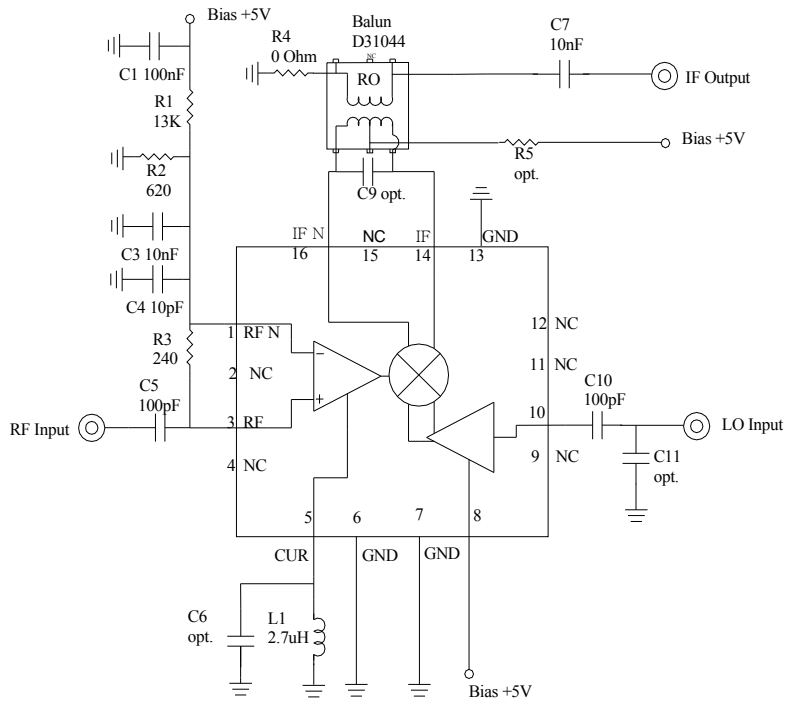
Pin No.	Function	Pin No.	Function
1	RFN In	16	IFN Out
2	NC	15	NC
3	RF In	14	IF Out
4	NC	13	Ground
5	CUR	12	NC
6	Ground	11	NC
7	Ground	10	Lo_In
8	Bias	9	NC

Functional Diagram

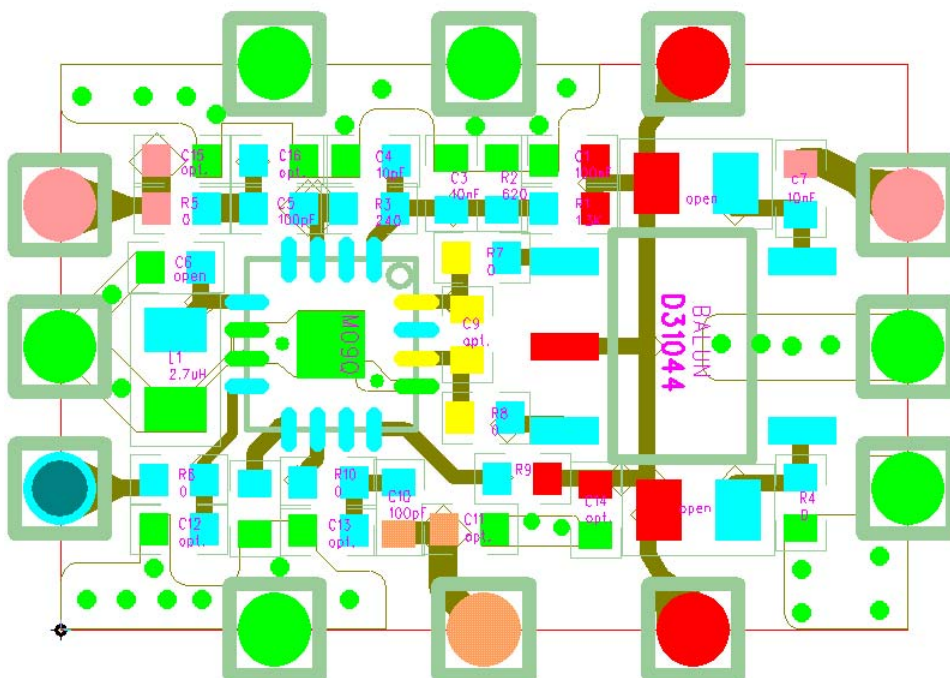


Typical Schematic

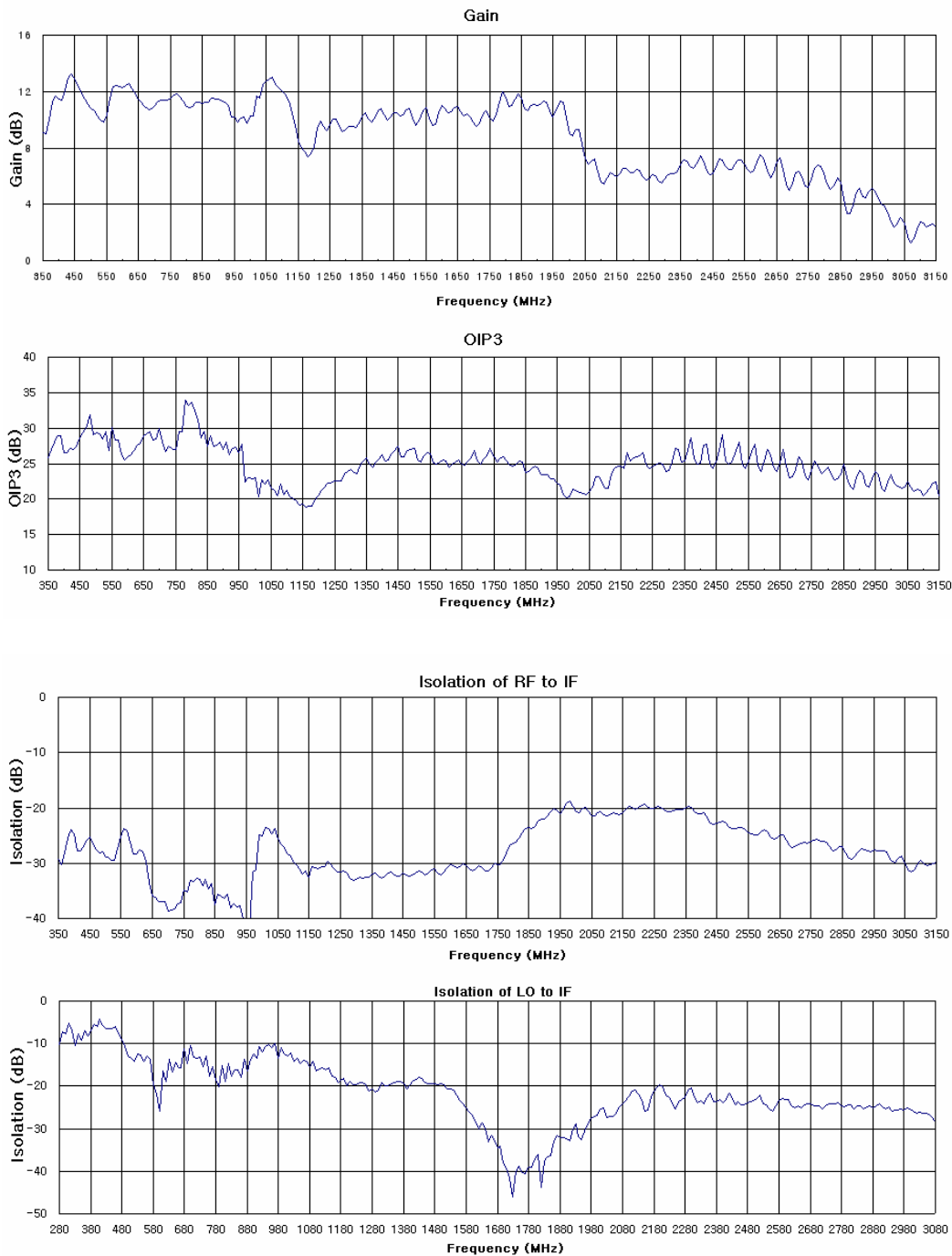
External Matchings are required to MO9Q



Evaluation Board Layout



Test Condition: Input 350~3150MHz@-10dBm/tone separated by 1MHz, Output 70MHz



RFHIC Corporation (RFHIC) reserves the right to make changes to any products herein or to discontinue any product at any time without notice. RFHIC do not assume any liability for the suitability of its products for any particular purpose, and disclaims any and all liability, including without limitation consequential or incidental damages. The product specifications herein expressed have been carefully checked and are assumed to be reliable. However, RFHIC disclaims liability for inaccuracies and strongly recommends buyers to verify that the information they are using is current before placing purchase orders. RFHIC products are not intended for use in life support equipment or application where malfunction of the product can be expected to result in personal injury or death. Buyer uses or sells such products for any such unintended or unauthorized application, buyer shall indemnify, protect and hold RFHIC and its directors, officers, stockholders, employees, representatives and distributors harmless against any and all claims arising out of such use. RFHIC's liability under or arising out of damages, claims of whatsoever kind and nature which RFHIC products could cause shall be limited in amount to the net purchase price of the products sold to buyer by RFHIC.