

## 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
- Pb Free / RoHS Standard

## Application

- Repeater
- Base Station
- RF Sub-Systems



Package Type: HY-1

## Description

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

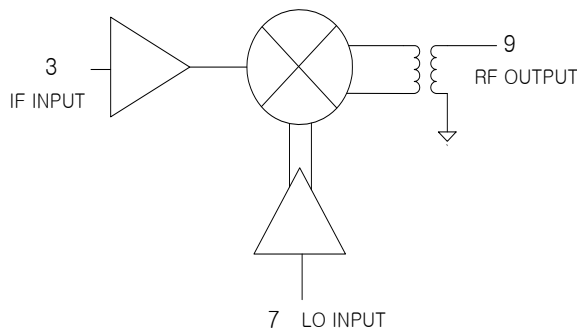
The MCM is implemented with reliable and mature GaAs MESFET technology.

## Specifications

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

IF Frequency (MHz)	LO Frequency (MHz)	RF Frequency (MHz)	Conversion Gain (dB)	OIP3 (dBm)	P1dB (dBm)	LO to RF Leakage (dBm)	IF to RF Leakage (dBm)	Vdd/Idd
70	1630-1730	1700-1800	7	26	10	-20	-60	5V/125mA
	1730-1830	1800-1900	4	18	8	-15	-60	5V/125mA

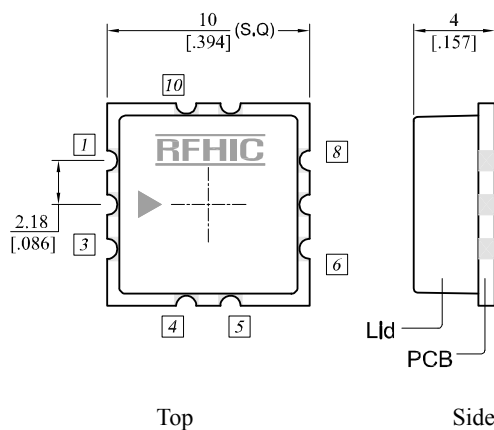
## Functional Diagram



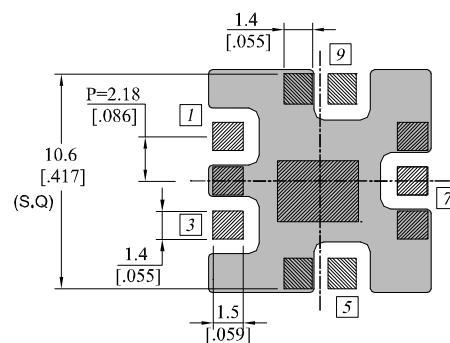
## Functional Pin Layout

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

## Package Dimensions (Type: HY-1)



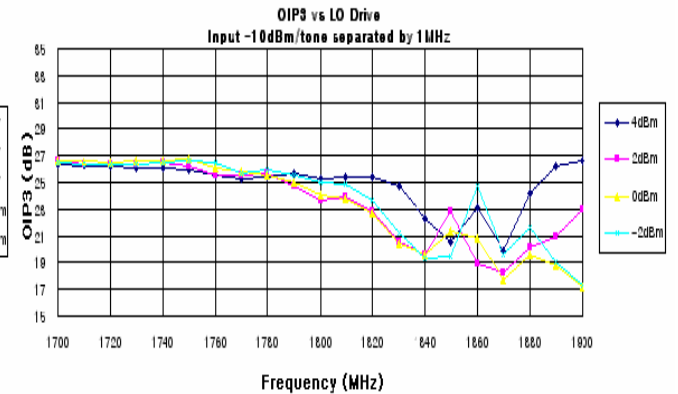
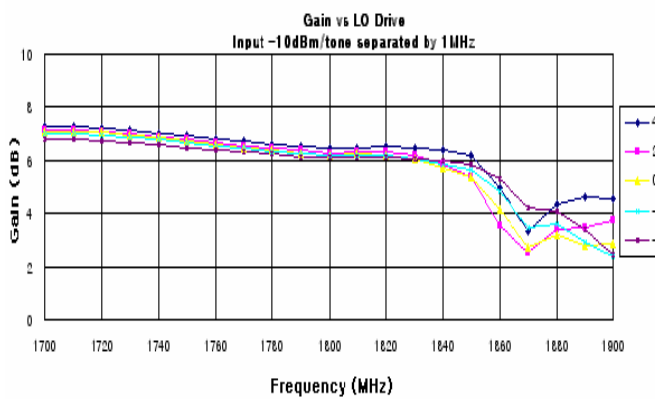
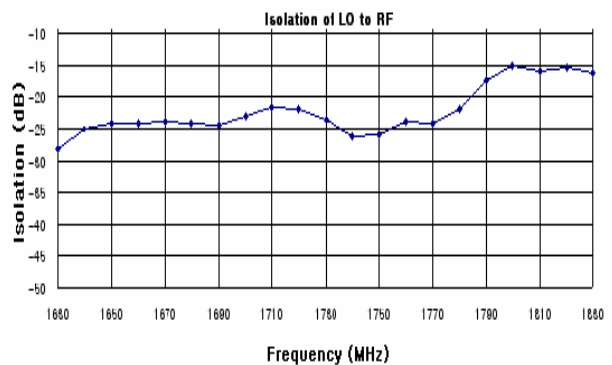
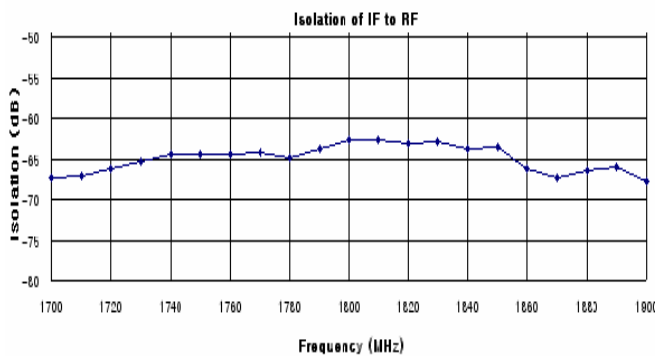
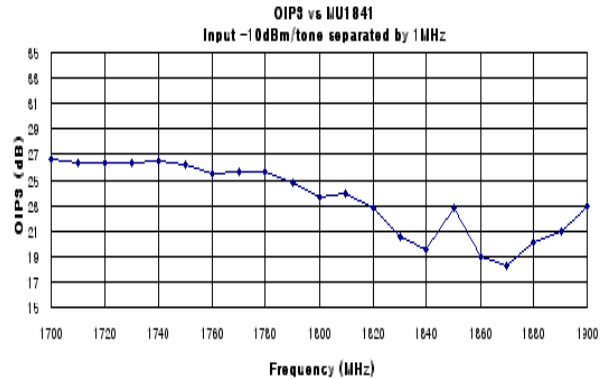
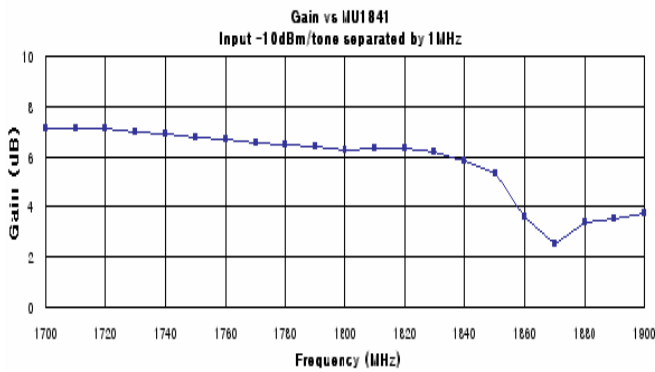
Unit :  $\frac{\text{mm}}{\text{inch}}$  Tolerance :  $\pm \frac{0.2}{.008}$



Recommended Pattern

## Typical Performance at 25°C

Test Condition: IF = 70MHz@-10dBm, LO = 1630~1830MHz@2dBm, RF = 1700~1900MHz



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