# **Active Up Mixer**

#### **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

#### Description

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

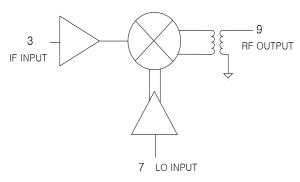
The MCM is implemented with reliable and mature GaAs MESFET technology.

#### **Specifications**

(Operating Temperature:	-30°C~+70°C)
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IF	LO	RF	Conversion	OIP3	P1dB	LO to RF	IF to RF	
Frequency	Frequency	Frequency	Gain			Leakage	Leakage	Vdd/Idd
(MHz)	(MHz)	(MHz)	( <b>dB</b> )	(dBm)	(dBm)	(dBm)	(dBm)	
70	1630-1730	1700-1800	7	26	10	-20	-60	5V/125mA
70	1730-1830	1800-1900	4	18	8	-15	-60	5V/125mA

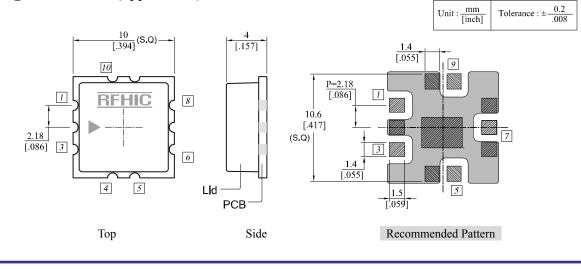
#### **Functional Diagram**



#### **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)



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Package Type: HY-1

#### • Repeater Base Station

Application

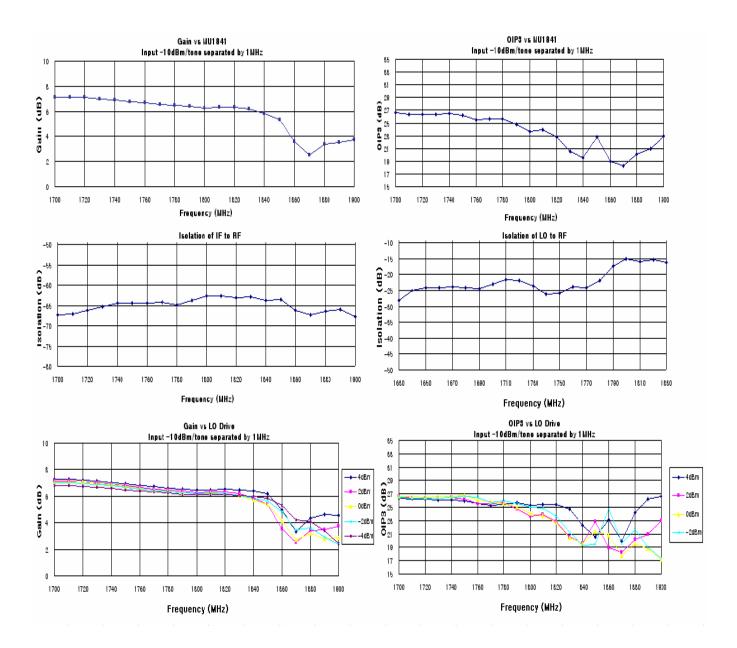
- RF Sub-Systems

**MU1841** 

## **Active Up Mixer**

#### Typical Performance at 25 ℃

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



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