

Product Features

- Integrated Monolithic GaAs Converter Package Module
- High Reliability
- Lower Manufacturing Cost
- Higher Productivity
- Very Low Noise Figure & Low Distortion
- Very Low Phase Noise (Ceramic Resonator used)
- Pb Free / RoHS Standard

Application

- Repeater
- Base Station



Package Type: HY-5A

Description

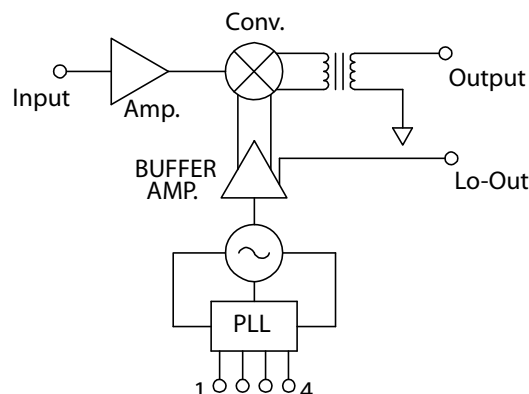
Cellular Converter is a very compact size due to using simple matching circuit board including PLL circuits. Customers can apply this part to Cellular systems.

Specifications

(Operating Temperature: -30°C~+80°C)

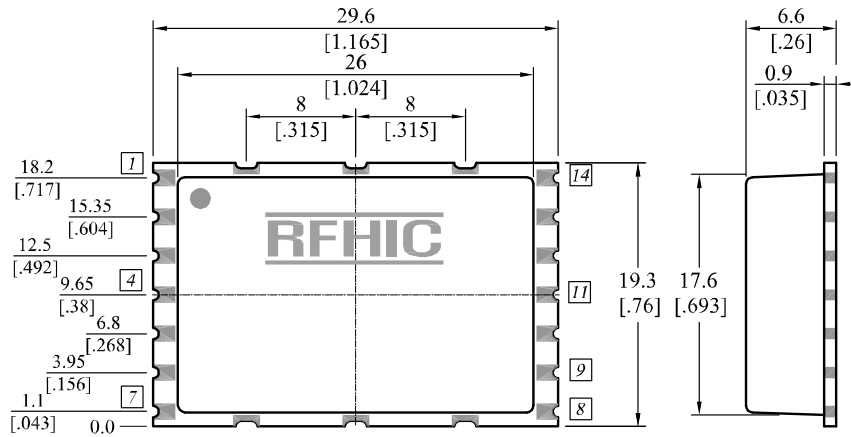
PARAMETER	RFUR39-50 (Up)	RFDR93-51 (Down)
Input Frequency Range (MHz)	360 (IF)	920~960 (RF)
Output Frequency Range (MHz)	920~960 (RF)	360 (IF)
Local Frequency Range (MHz)	560~600 (LO)	560~600 (LO)
Conversion Gain (dB)	6±1	6±1
Gain Flatness@50MHz (dB) (Max.)	±1	±1
Noise Figure (Typ)(dB)	7	7
OIP3 (Typ)(dBm)	25	25
LO to RF Leakage (dBm)	-10	-15
LO to IF Leakage (dBm)	-20	-20
IF to RF / RF to IF Leakage (dBm)	-20	-20
LO Output Level (dBm)	4±1	4±1
LO Phase Noise (Typ) Step Size : 10KHz	-65dBc/Hz @1KHz -95dBc/Hz @10KHz -110dBc/Hz @100KHz	-65dBc/Hz @1KHz -95dBc/Hz @10KHz -110dBc/Hz @100KHz
PLL Control (LMX2326)	3 wire	3 wire
Vcc / Idd	5V / 170mA	5V / 170mA

Functional Diagram

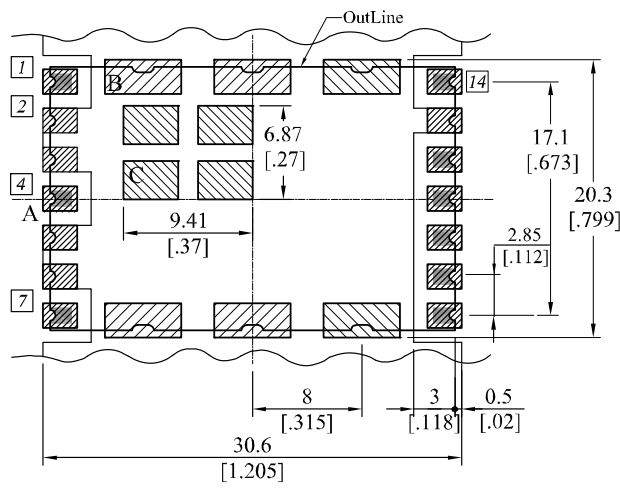


Pacakage Dimensions (Type: HY-5A)

Unit : $\frac{\text{mm}}{\text{[inch]}}$	Tolerance : $\pm \frac{0.2}{.008}$
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Recommended Pattern



Pin No.	Function	Pin No.	Function
1	Input	14	Output
2	Ground	13	Ground
3	Ground	12	Lo_Out
4	Vcc+5V	11	Fo/LD
5	Ground	10	LE
6	Ground	9	Data
7	Ref in	8	Clock

Pattern Size WxL		
	mm	inch
A	2.5 x 1.8	.098 x .071
B	5.6 x 2.5	.22 x .098
C	4 x 2.8	.157 x .11

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