



**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**

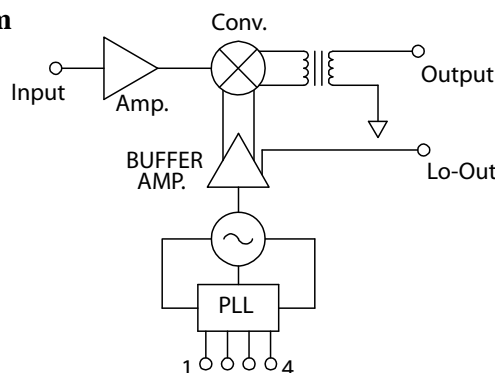
Converter is a very compact size due to using simple matching circuit board including PLL circuits. Customers can apply this part to systems.

**Specifications**

(Operating Temperature:-30°C~+80°C)

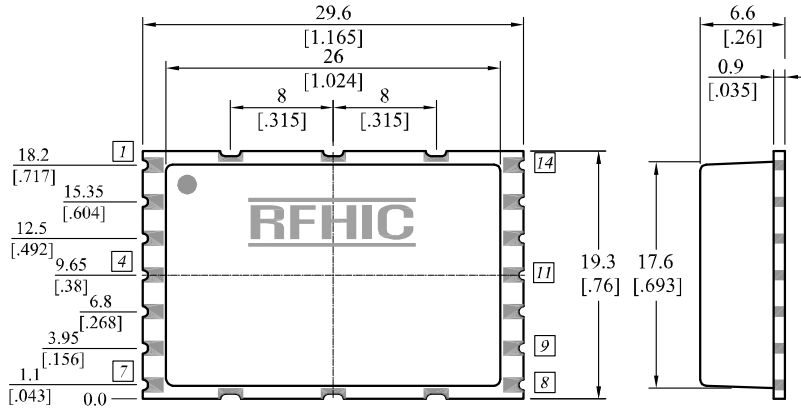
PARAMETER	RFUR89-60 (UP)	RFDR98-61 (DOWN)
Input Frequency Range (MHz)	824~849	1750~1780
Output Frequency Range (MHz)	1750~1780	824~849
Local Frequency Range (MHz)	926~931	926~931
Conversion Gain (dB)	6±1	6±1
Gain Flatness @ 30MHz (dB) (Max.)	±1	±1
Noise Figure (Typ.)(dB)	7	10
OIP3 (dBm)	24	24
LO to RF Leakage (dBm)	-10	-15
LO to IF Leakage (dBm)	-20	-20
IF to RF / RF to IF Leakage (dBm)	-20	-20
LO Output Level	4±1	4±1
LO Phase Noise (Typ.) Step Size : 200KHz	-65dBc/Hz @1KHz -95dBc/Hz @10KHz -115dBc/Hz @100KHz	-65dBc/Hz @1KHz -95dBc/Hz @10KHz -115dBc/Hz @100KHz
PLL Control (LMX2326)	3 wire	3 wire
Vcc/Idd	5V / 170mA	5V / 170mA

**Functional Diagram**

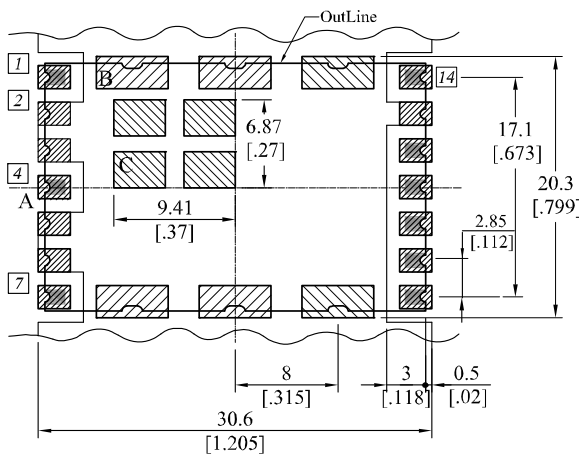


**Pacakage Dimensions (Type: HY-5A)**

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



**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		w	
	mm	mm	inch
A	2.5 x 1.8	.098	.071
B	5.6 x 2.5	.22	.098
C	4 x 2.8	.157	.11

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• All specifications may change without notice.  
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