

# MODEL HILNA18402835

## 18-40GHz Low Noise Amplifier



Note: The photo is for illustration purposes only.  
Please refer to outline drawing

### ■ Features

- Ultra Wide Band: 18-40GHz
- Gain: 26dB
- Output Power: 20dBm
- High Output IP3: 25dBm

### ■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

### □ Electrical Specifications

Parameter	Min.	Typ.	Max	Units
Frequency Range	18-40			GHz
Gain	23	28		dB
Gain Flatness		± 2.0	± 2.5	dB
Input VSWER		1.8	2.5	-
Output VSWR		1.8	2.5	-
Output Power for 1 dB Compression (P1dB)	15	20		dBm
Noise Figure		3.5	5.0	dB
Output IP3		25		dBm
Input Max Power(no damage)			10	dBm
DC Current (Vcc=+12~24V)		200	300	mA
Phase Linearity	Per GHz over complete band is +/- 7 Deg max Over Full Band is +/-20 Deg max			
Unit to Unit Phase Tracking		+/-30		Deg
Group Delay		+/-100		ps
Impedance		50		Ω
Input Output Connector	2.92-k			
Material	Aluminium\Gold Painting			
Weight	50g			
Package Sealing	General Sealing (Standard); Hermetically Seal(Optional)			

### Environmental Conditions

Operational Temperature	-45°C~+85°C	Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Storage Temperature	-55°C~+125°C	Shock	20G for 11msc half sin wave, 3 axis both directions
Executive Standard	MIL-STD-810G	Humidity	100% RH at 35c, 95%RH at 40°C

### Absolute Maximum Ratings

Supply Bias Voltage	+28V
RF INPUT POWER	+10dBm
ESD sensitivity (HBm)	Class 0, passed 150V

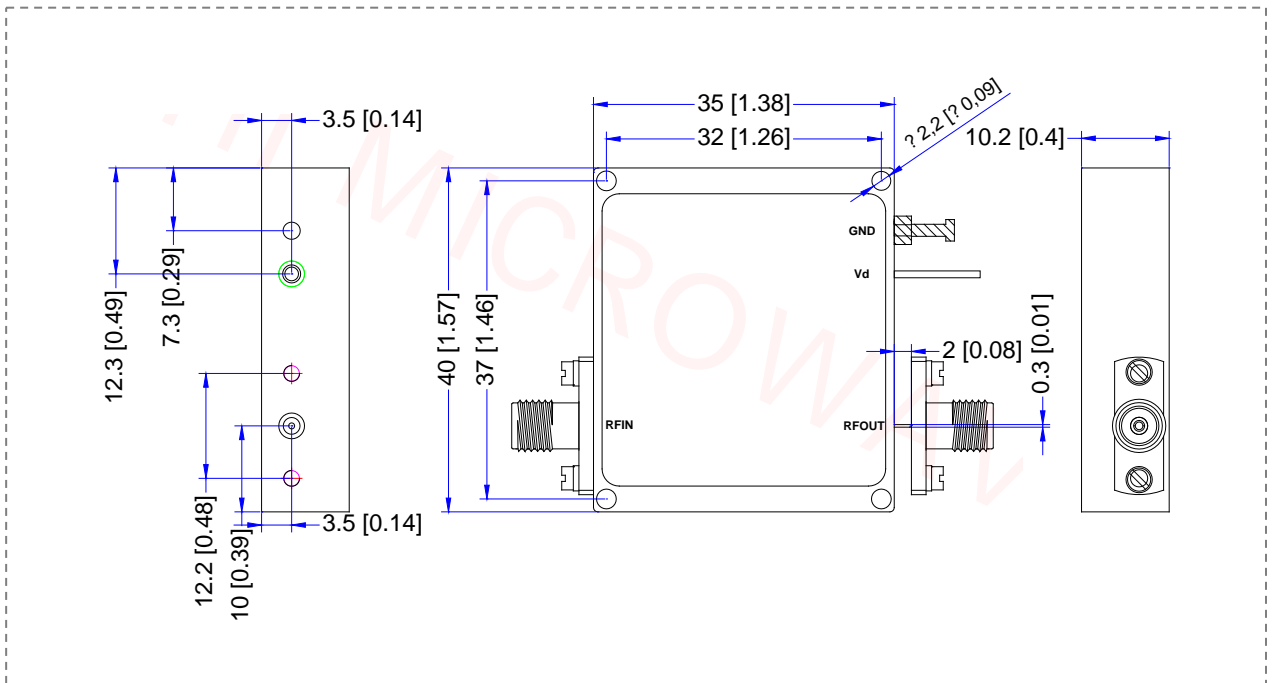


OBSERVE  
PRECAUTIONS  
ELECTROSTATIC  
SENSITIVE  
DEVICES

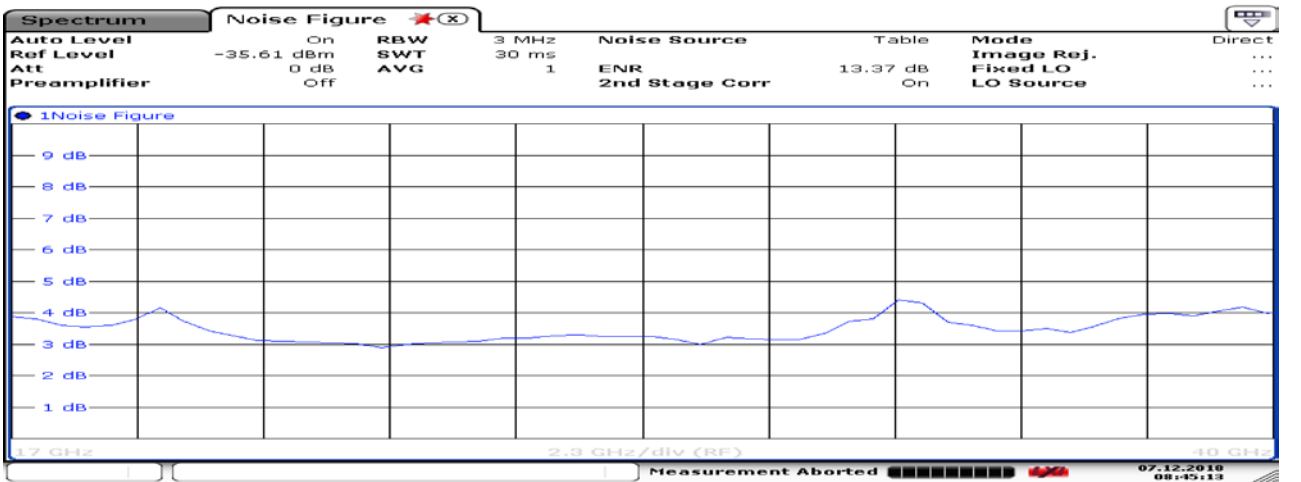
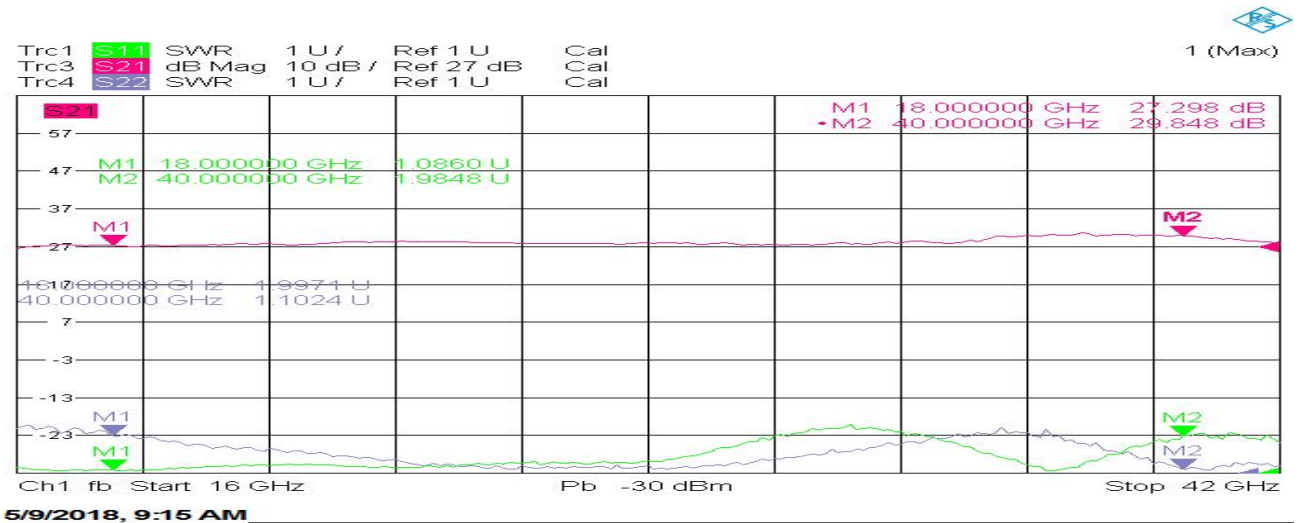
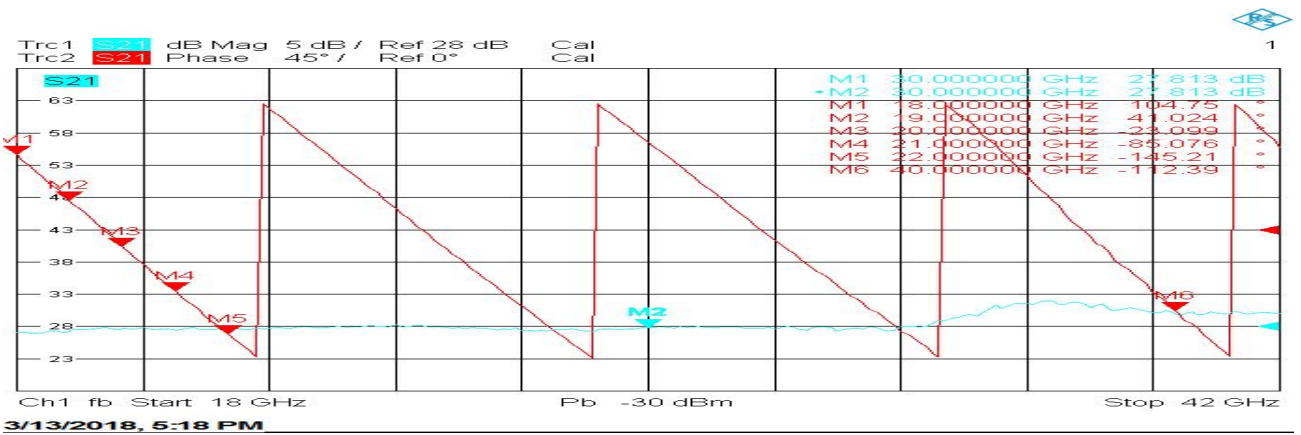


### Outline Drawing

All Dimensions in mm ( inches ) Tolerance  $\pm 0.25$  ( 0.01 )



**\*\*\*Heat Sink required during operation\*\*\***



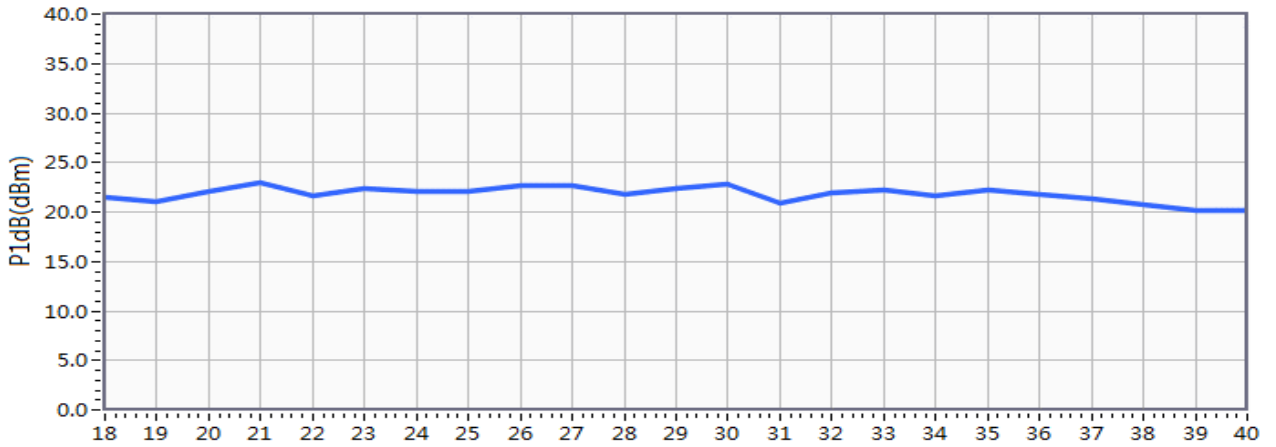
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P1dB vs. Frequency



P3dB vs. Frequency

