



Ultra Wide Band Low Noise Amplifier 26GHz~47GHz

Features

- Gain: 70dB Typical
- Noise Figure: 5.0dB Typical
- P1dB Output Power: +10dBm Typical
- Supply Voltage: +12V @ 1000mA
- 50 Ohm Matched Input / Output



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	18		26	26		47	GHz
Gain	65	75		60	70		dB
Gain Flatness		±3.0			±5.0		dB
Gain Variation Over Temperature (-40°C~+85°C)		±2.0			±3.0		dB
Noise Figure		4.0			5.5		dB
Input VSWR		2.0			2.5		: 1
Output VSWR		2.0			2.5		: 1
Output 1dB Compression Point (P1dB)	10	15		5	10		dBm
Saturated Output Power (Psat)		17			12		dBm
Output Third Order Intercept (OIP3)		23			20		dBm
Supply Current (Idd) (Vdd=+12V)		1000	1200		1000	1200	mA
Isolation S12		-75			-75		dB

Weight	11.99ounces	Impedance	50ohms
Input / Output Connectors	2.4mm-Female	Material	Aluminum
Finish	Gold Plated	Package Sealing	Epoxy Sealed (Standard)
			Hermetically Sealed (Option with extra charge)



Absolute Maximum Ratings

Operating Voltage	+15V
RF Input Power (RFIN)	-40dBm

Biassing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +12V biasing

Power OFF Procedure

Step 1	Turn off +12V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

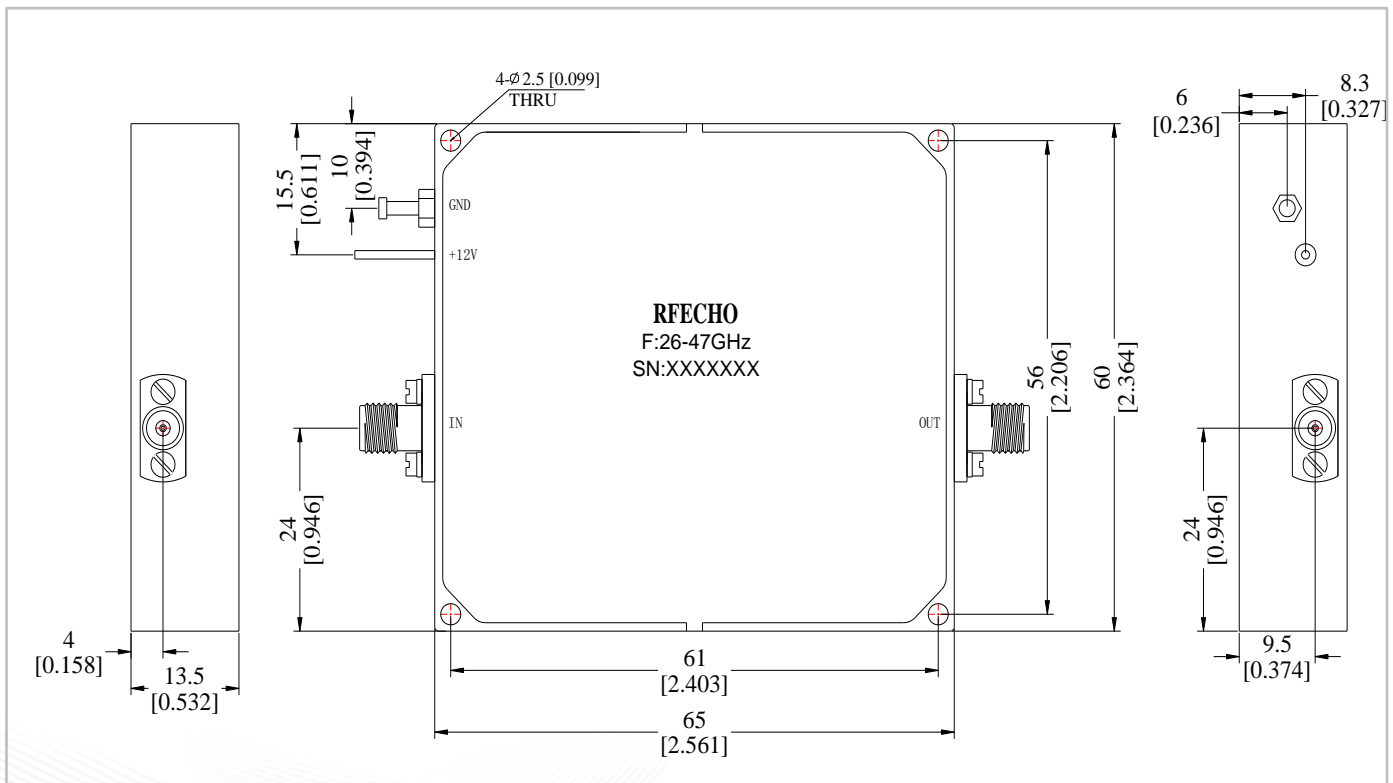
Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Outline Drawing:

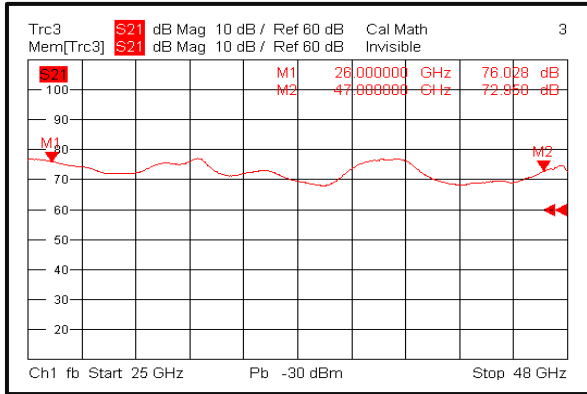
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)





Gain



P1dB vs. Frequency

