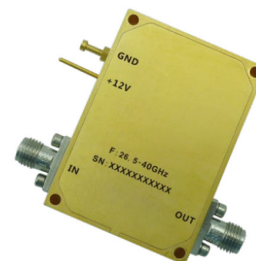


Wide Band Low Noise Amplifier 26.5GHz~40GHz

Features

- Gain: 47dB Typical
- Functional Bandwidth : 24GHz to 40GHz
- Noise Figure: 2.5dB Typical
- P1dB Output Power: +20dBm Typical
- Supply Voltage: +12V @ 270mA
- 50 Ohm Matched



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	26.5		32	32		40	GHz
Gain	47	48		46	47		dB
Gain Flatness		±1.0			±2.0		dB
Gain Variation Over Temperature (-40°C~+85°C)		±1.5			±3.0		dB
Noise Figure		2.5	3.0		3.0	4.0	dB
Input VSWR		1.8			2.0		: 1
Output VSWR		2.0			3.0		: 1
Output 1dB Compression Point (P1dB)	18	21		15	18		dBm
Saturated Output Power (Psat)		22			19		dBm
Output Third Order Intercept (OIP3)		25			20		dBm
Isolation S12		-50			-50		dB
Supply Current (Vcc=+12V)		270	400		270	400	mA

Weight	2.2ounces Max.	Impedance	50ohms
Input / Output Connectors	2.92mm-Female	Material	copper
Finish	Gold Plated	Package Sealing	Epoxy Sealed (Standard)
			Hermetically Sealed (Option with extra charge)



Absolute Maximum Ratings

Operating Voltage	+15V
RF Input Power (RFIN)	-25dBm

Biasing 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

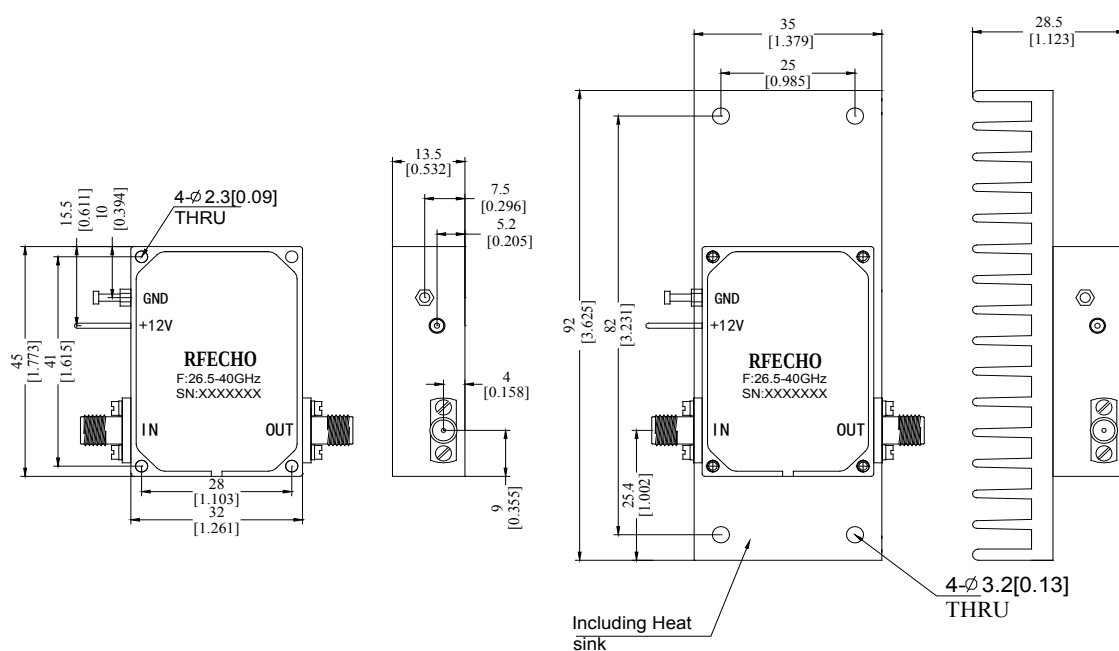
Environmental Specifications

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:

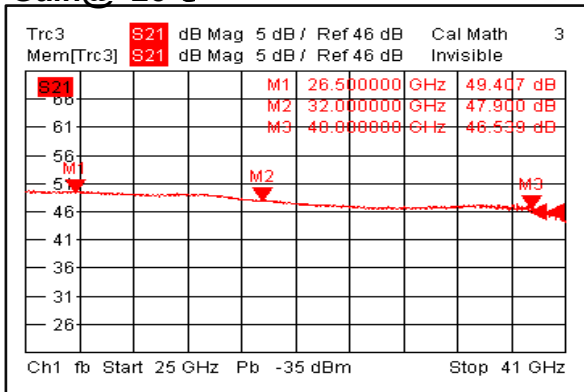
All Dimensions in mm (inches)
Housing Tolerances ± 0.1 (0.004)
(Excl Heat Sink)

Heat Sink required during operation (Sold Separately)

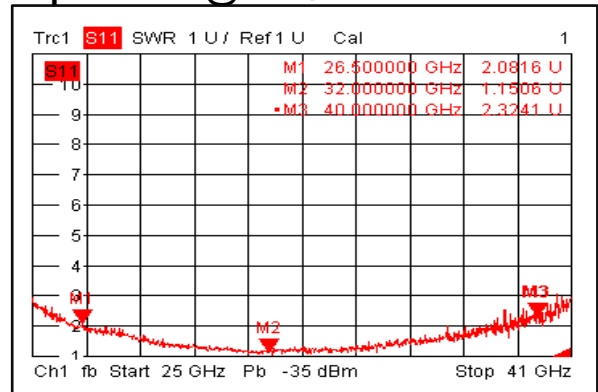




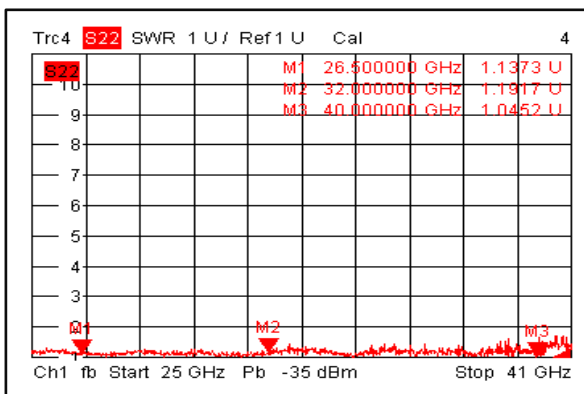
Gain@+25°C



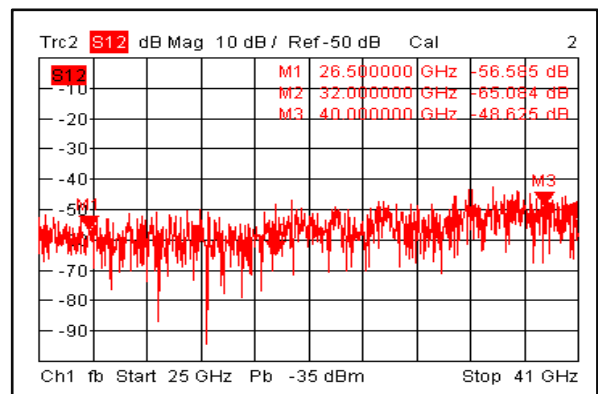
Input VSWR@+25°C



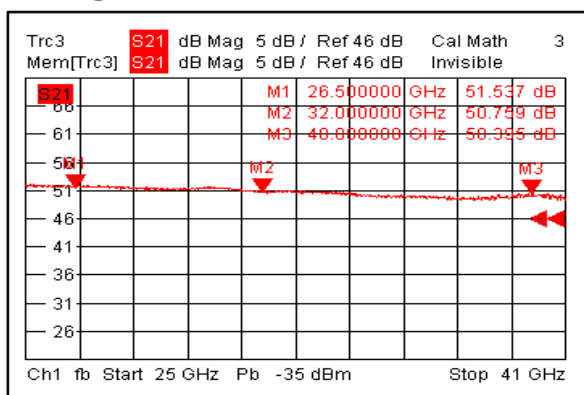
Output VSWR@+25°C



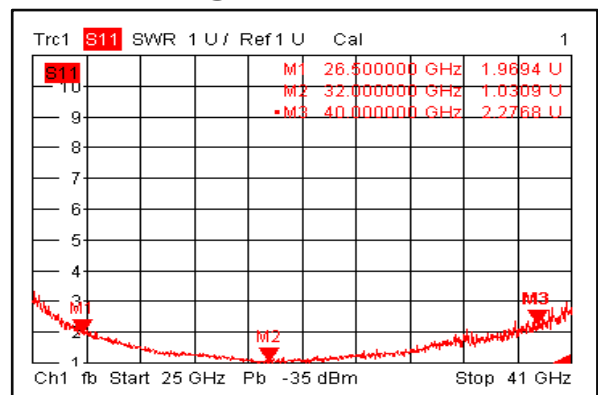
Isolation@+25°C



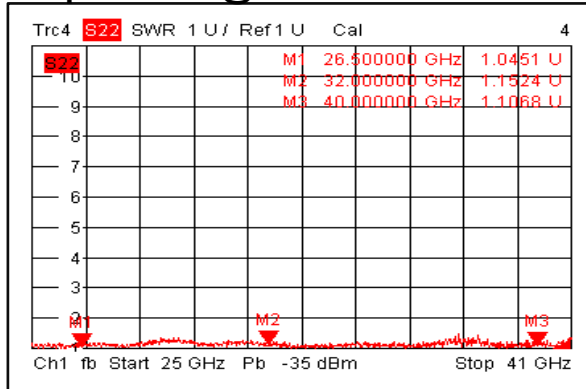
Gain@-40°C



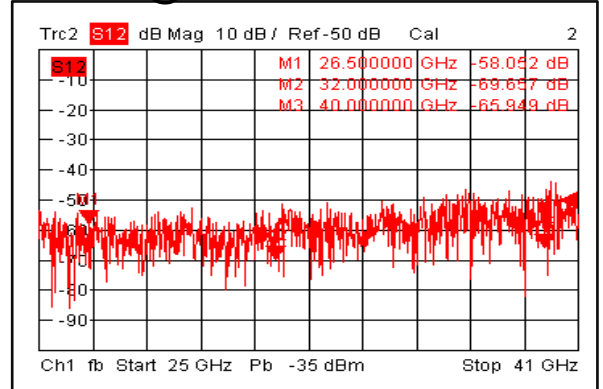
Input VSWR@-40°C



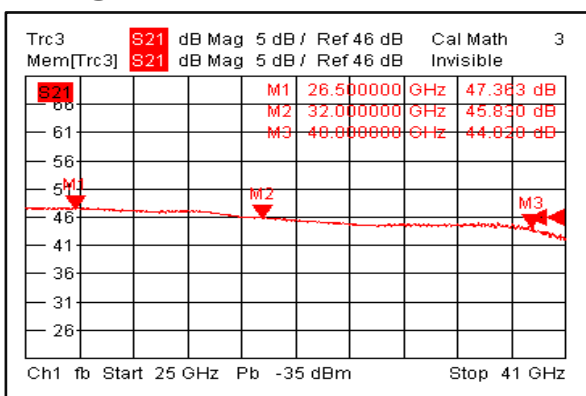
Output VSWR@-40°C



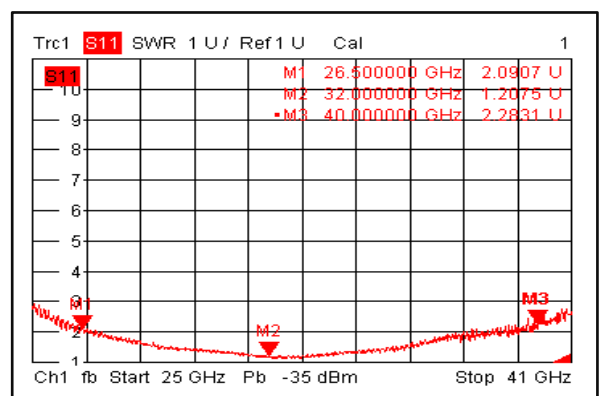
Isolation@-40°C



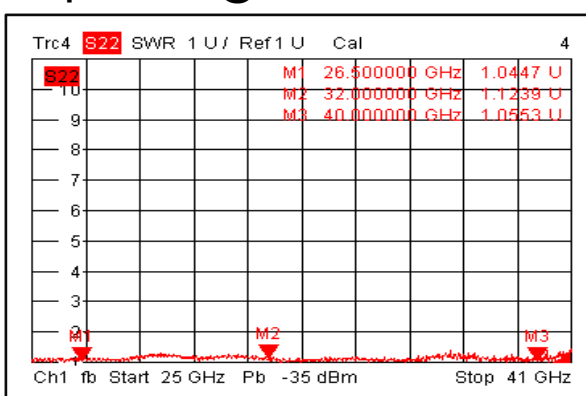
Gain@+85°C



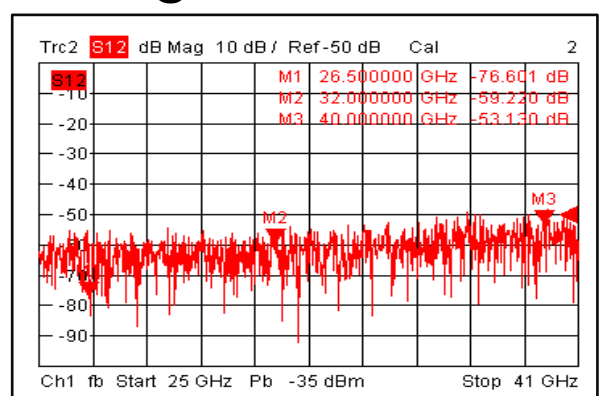
Input VSWR@+85°C



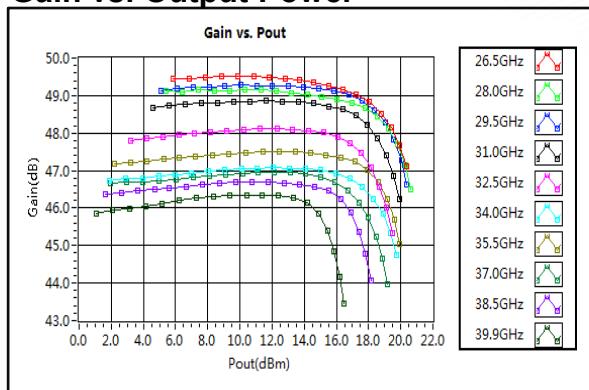
Output VSWR@+85°C



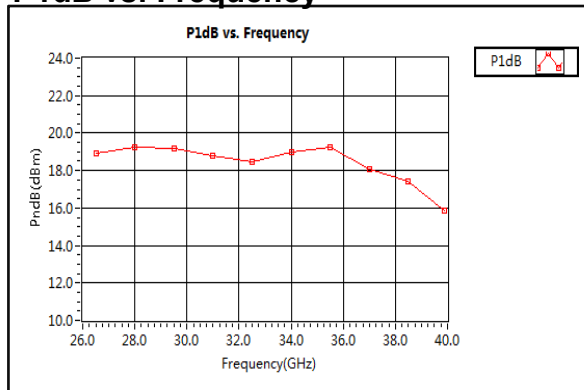
Isolation@+85°C



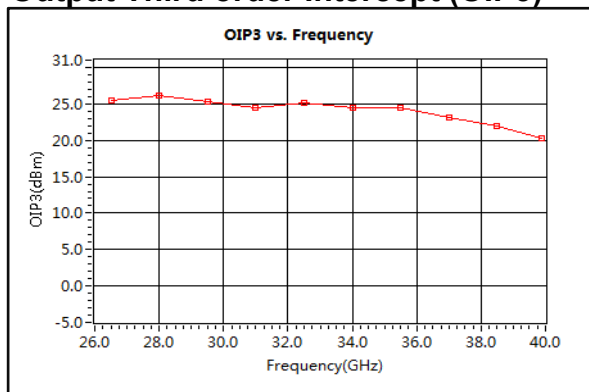
Gain vs. Output Power



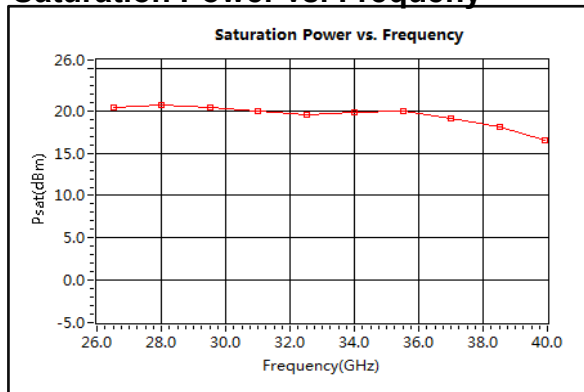
P1dB vs. Frequency



Output Third order Intercept (OIP3)



Saturation Power vs. Frequency



Noise Figure

