

MODEL: LF40-S-43

Solid State High Power Amplifier Systems

18-26.5GHz, Gain: 50dB, Psat: 50 dBm, 220V AC

- Feature :
- Wide Band: 18-40GHz
 - Gain: 43dB Min
 - Psat Output Power: 43dBm Min
 - Protection: Over TEM, over voltage, over current, over VSWR protection.
 - 50 Ohm Matched Input / Output

ELECTRICAL SPECIFICATION:

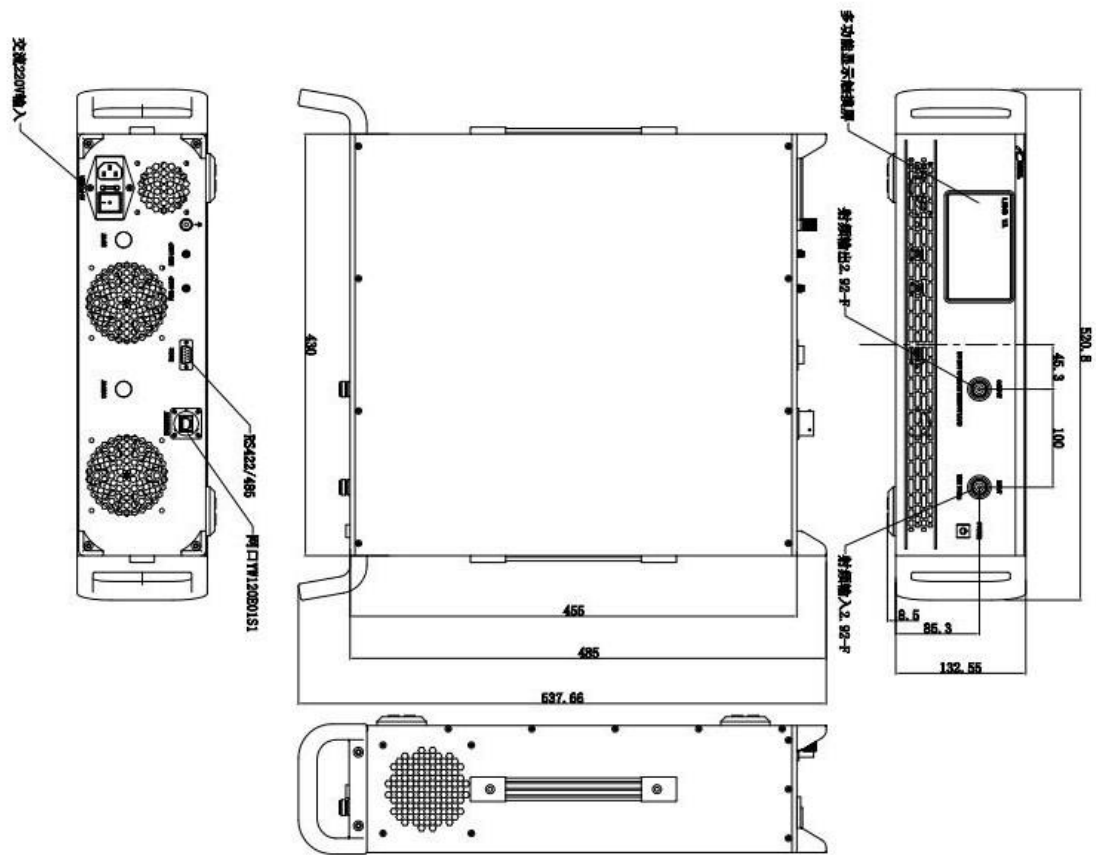
Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	18-40			GHz
Power Gain	GP	43			dB
Gain flatness	ΔGL		±5		dB
Output Psat	Psat	43	44		dBm
ALC accuracy	ALC			±0.5	dB
Spurious@Pout=43dBm	Spur			-50	dBc
Harmonics@Pout=43dBm	HAM			-15	dBc
Rise/Fall Time	Tr		50		ns
Input VSWR	VSWRin			2	:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss			600	W
Working Mode	MOD	CW/PULSE compatible			
Impedance	I/O-IMP	50			Ohms

MECHANICAL SPECIFICATION:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
Communication Connector	DB9/RJ45	
Size	19 Inch 3U*550	mm
Weight	≤35	Kg

OUTLINE DRAWING

Unit: mm



KEY FEATURES:

Parameter	Advantages
Control functions	1. Power setting On/Off
Display functions	1. Output power 2. Reflect power 3. Fault information
Protection functions	1. Over TEM 2. Over voltage 3. Over current 4. Over VSWR
Remote control	RS422/Ethernet
Cooling system	Built in Cooling system, forced air cooling

ABSOLUTE MAXIMUM RATINGS:

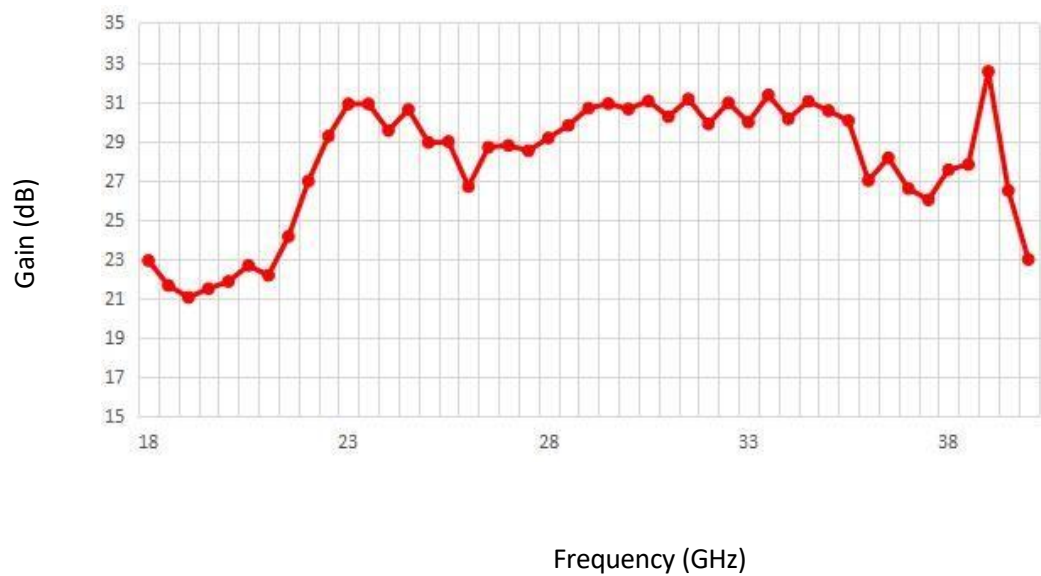
Parameter	Value
RF Input Power	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

ENVIRONMENTAL CONDITIONS:

Parameter	Min	Typ	Max	Units
Operating Temperature	-20		+40	°C
Non-operating Temperature	-30		+50	°C
Relative humidity		95		%
Altitude	10000			feet
Shock / Vibration(MIL-STD- 810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

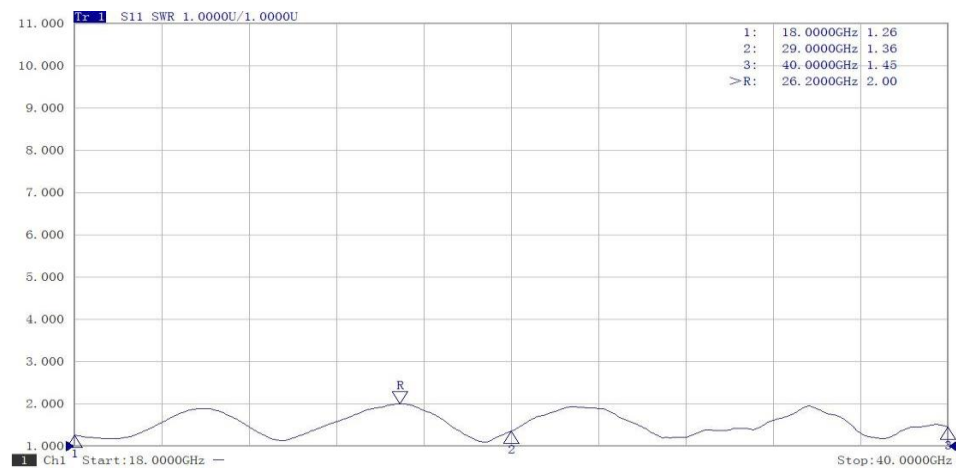
TYPICAL PERFORMANCE DATA:

Small Signal Gain vs Frequency



Input VSWR vs Frequency

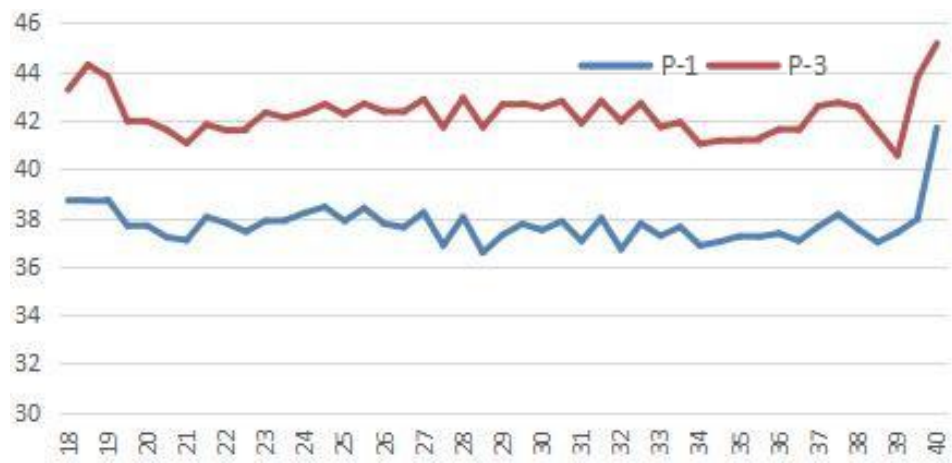
Input VSWR



Frequency (GHz)

PndB vs Frequency

PndB (dBm)



Frequency (GHz)

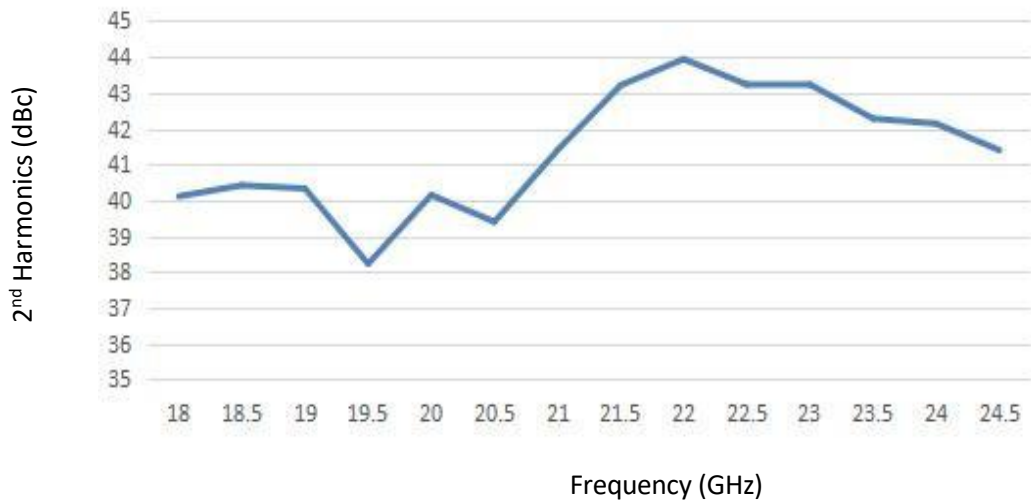
Pout@Pin

Pout (dBm)

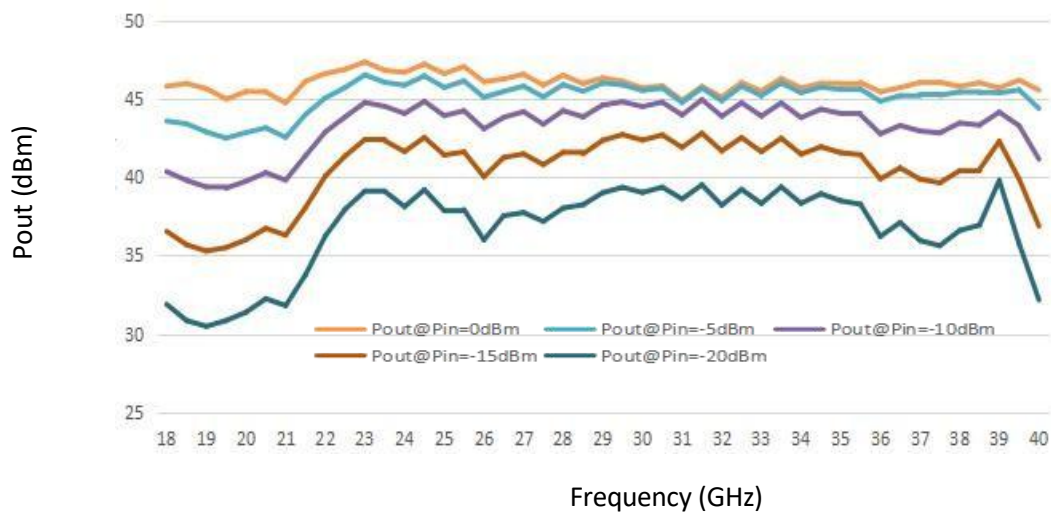


Pin (dBm)

2nd Harmonics vs Frequency



Pout @ Equal Pin



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

ORDERING INFORMATION:

Part Number	Description	Revision
LF40-S-43	Solid State High Power Amplifier Systems 18-40 GHz, Gain: 43dB, Psat: 43dBm, 220V AC, Built in Fan Cooling	Rev.1.0