

MODEL: LF18-S-50

Solid State High Power Amplifier Systems

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

- Feature :
- Wide Band: 18-26.5GHz
 - Gain: 50dB Min
 - Psat Output Power: 50dBm Min
 - Protection: Over TEM, over voltage, over current, over VSWR protection.
 - 50 Ohm Matched Input / Output

ELECTRICAL SPECIFICATION:

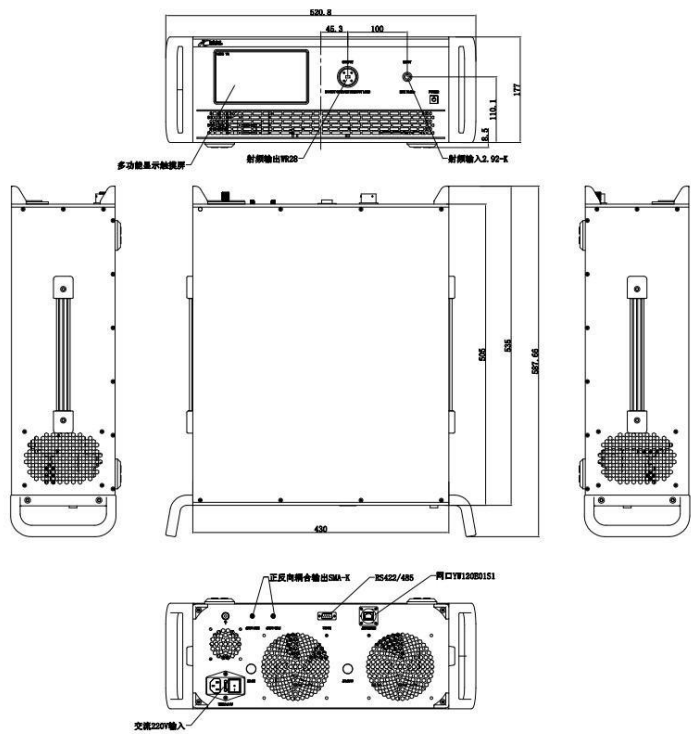
Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	18-26.5			GHz
Small Signal Gain	SSGP	50			dB
Gain flatness	Δ GL		± 3	± 4	dB
Output Psat	Psat	50			dBm
Spurious@Pout=50dBm	Spur			-50	dBc
Harmonics@Pout=50dBm	HAM			-20	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss	1200@Max			W
Impedance	I/O-IMP	50			Ohms

MECHANICAL SPECIFICATION:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/WR 42	
Communication Connector	DB9/RJ45	
Size	19 Inch 4U*550	mm
Weight	≤ 35	Kg

OUTLINE DRAWING

Unit: mm



KEY FEATURES:

Parameter	Advantages
Control functions	1. Power setting On/Off 2. Output power adjust
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:

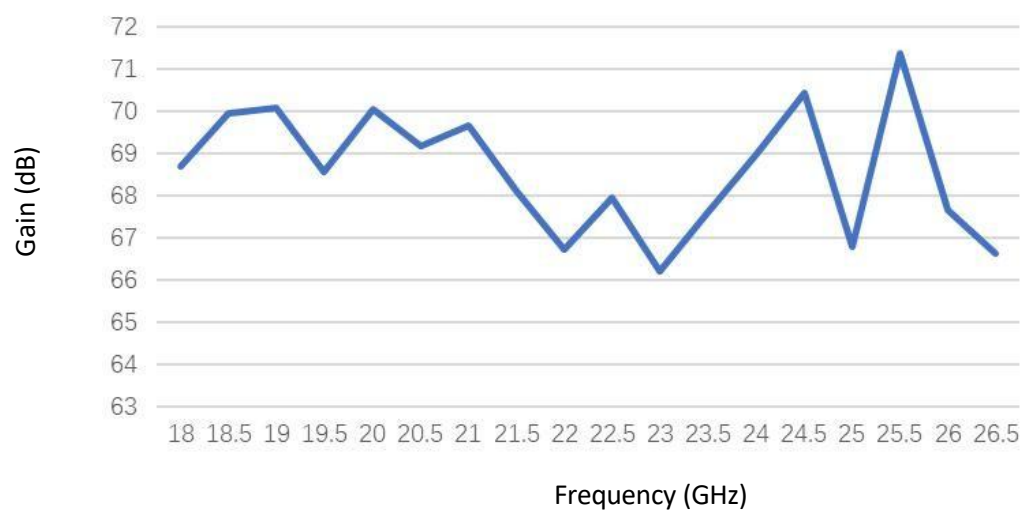
Parameter	Value
RF Input Power	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

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			

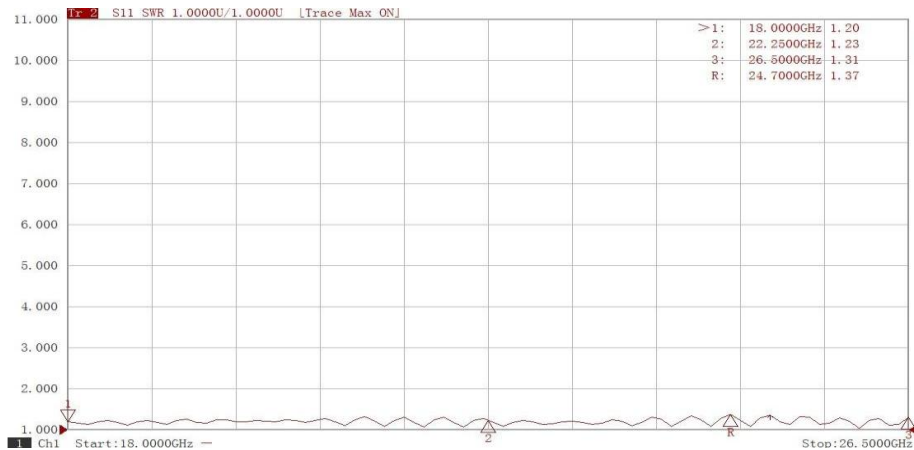
TYPICAL PERFORMANCE DATA:

Small Signal Gain vs Frequency



Input VSWR vs Frequency

Input VSWR



Frequency (GHz)

PndB vs Frequency

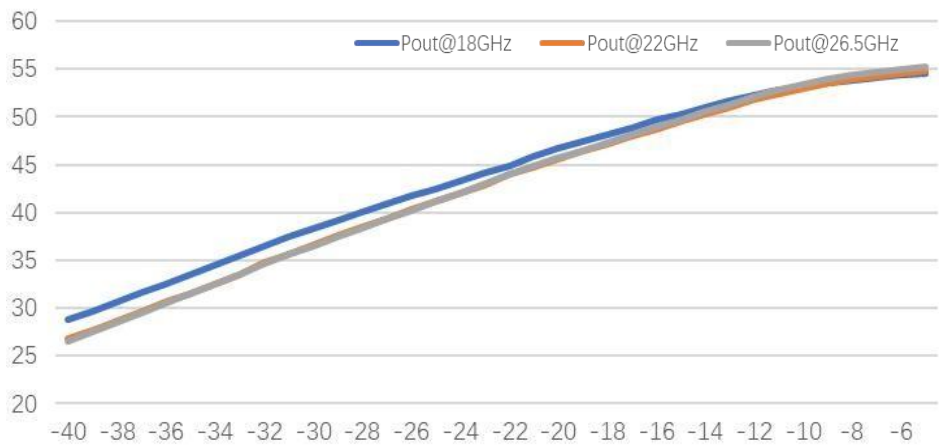
PndB (dBm)



Frequency (GHz)

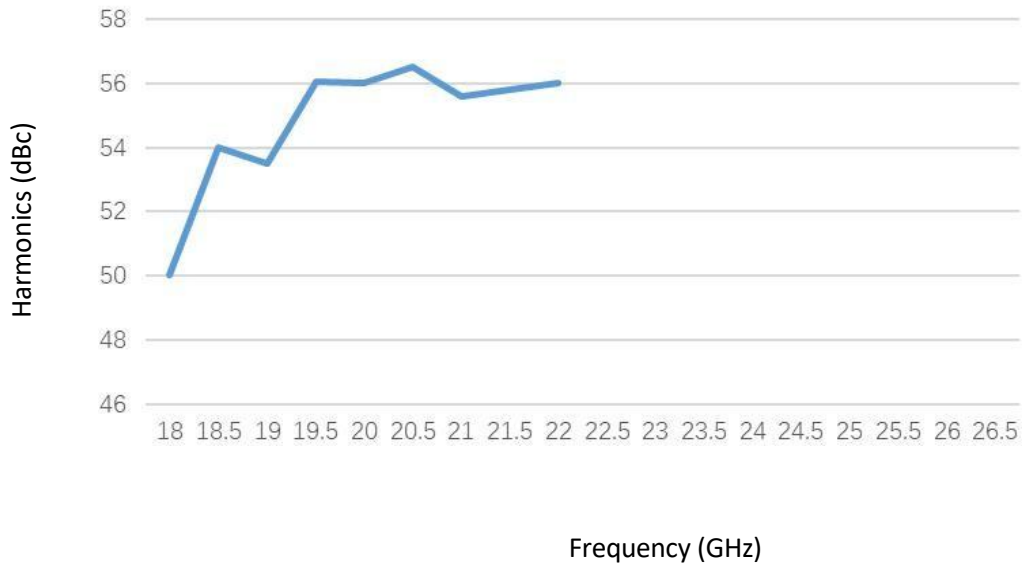
Pout@Pin

Pout (dBm)

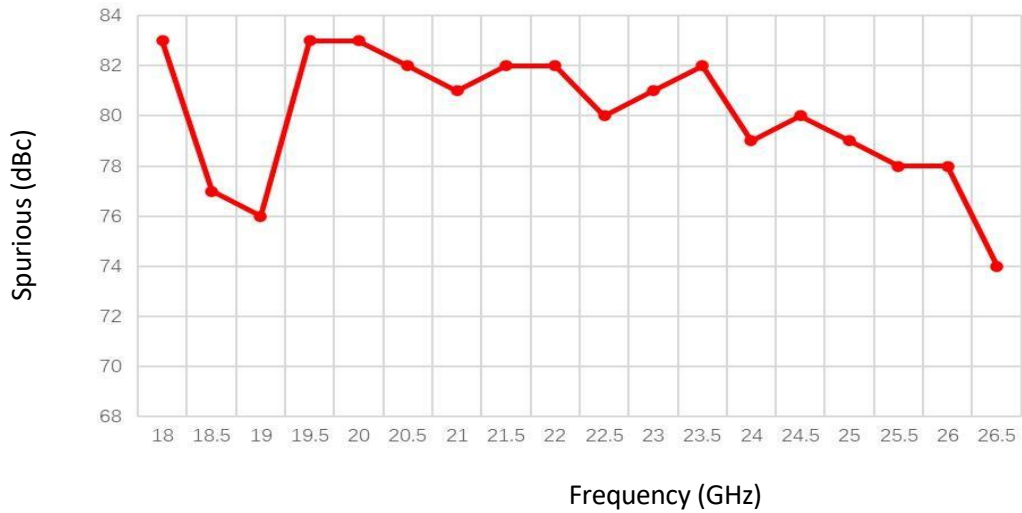


Pin (dBm)

2nd Harmonics vs Frequency



Spurious vs Frequency



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
LF18-S-50	Solid State High Power Amplifier Systems 18-26.5GHz, Gain: 50dB, Psat: 50dBm, 220V AC, Built in Fan Cooling	Rev.1.0