LUFTEK

MODEL: LF6-S-53
Solid State High Power Amplifier Systems
6-18GHz, Gain: 53dB, Psat: 53 dBm, 220V AC

Feature：

- Wide Band: 6-18GHz
- Gain: 53dB Min
- Psat Output Power: 53dBm Min
- Protection: Over TEM, over voltage, over current, over VSWR protection.
- 50 Ohm Matched Input / Output

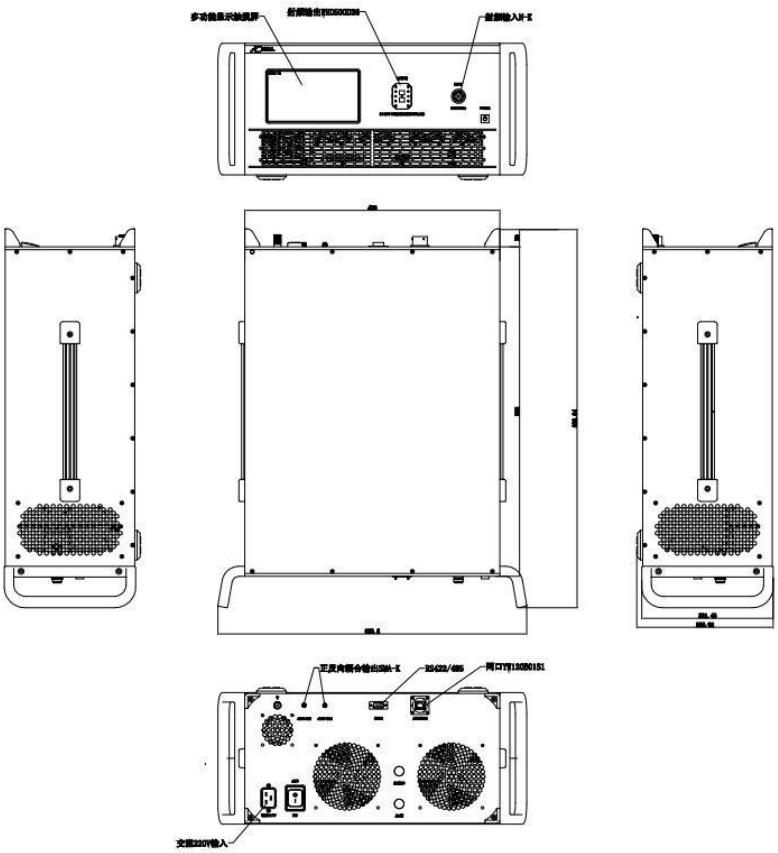
ELECTRICAL SPECIFICATION:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	6-18			GHz
Power Gain	GP	53			dB
Gain flatness	ΔGL		±3.5	±5	dB
Output P1dB	P1dB	50	51		dBm
Output Psat	Psat	53	54		dBm
Spurious@Pout=53dBm	Spur			-50	dBc
Harmonics@Pout=53dBm	HAM			-15	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac	200	220	240	V AC
Power Consumption	Pdiss			3200	W
Impedance	I/O-IMP	50			Ohms

MECHANICAL SPECIFICATION:

Parameter	Value	Units
Input/Output Connector	N Female/WRD500	
Forward/Reverse Coupling	SMA Female/ SMA female	
Communication Connector	DB9/RJ45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 5U*550	
Weight	≤35	Kg

OUTLINE DRAWING Unit: mm



KEY FEATURES:

Parameter	Advantages
Control	RS422/Ethernet, LCD Screen Display
Protection functions	1. Over TEM 2. Over voltage 3. Over current protection 4. Over VSWR
Control functions	1. Power setting On / Off 2. Gain control.
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

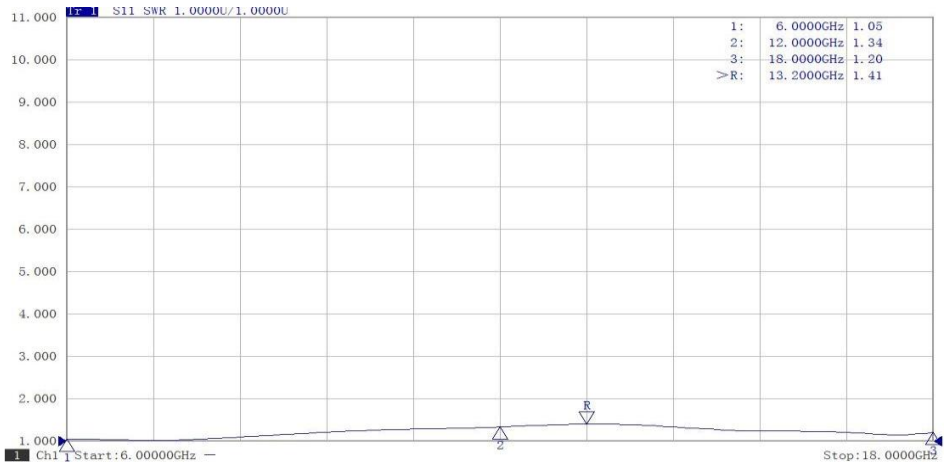
ENVIRONMENTAL CONDITIONS:

Parameter	Min	Typ	Max	Units
Operating Temperature	-20		+40	℃
Non-operating Temperature	-30		+50	℃
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

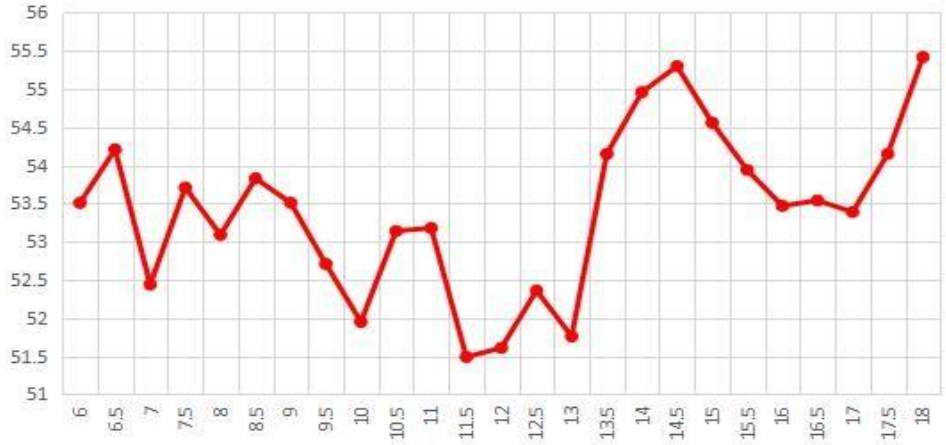
Input VSWR vs Frequency



Input VSWR

Frequency (GHz)

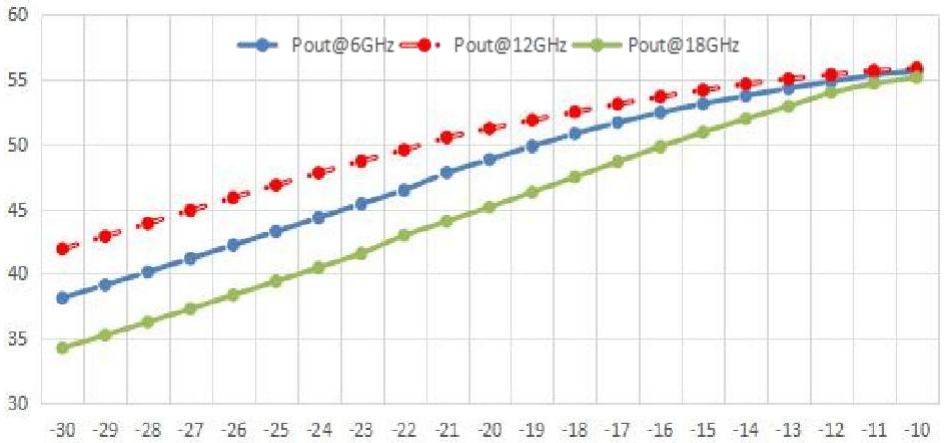
P1dB vs Frequency



P1dB (dBm)

Frequency (GHz)

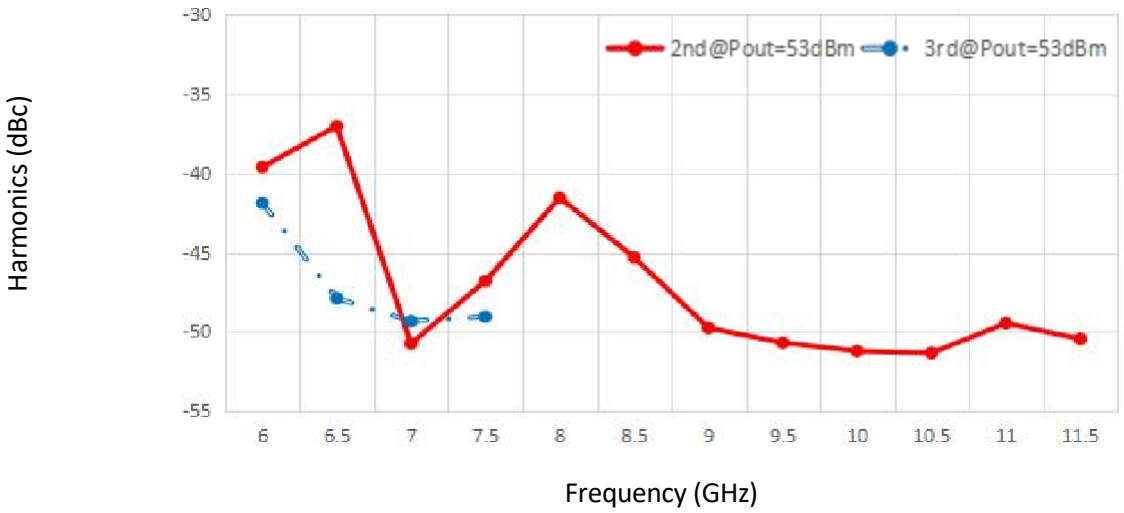
Pout@Pin



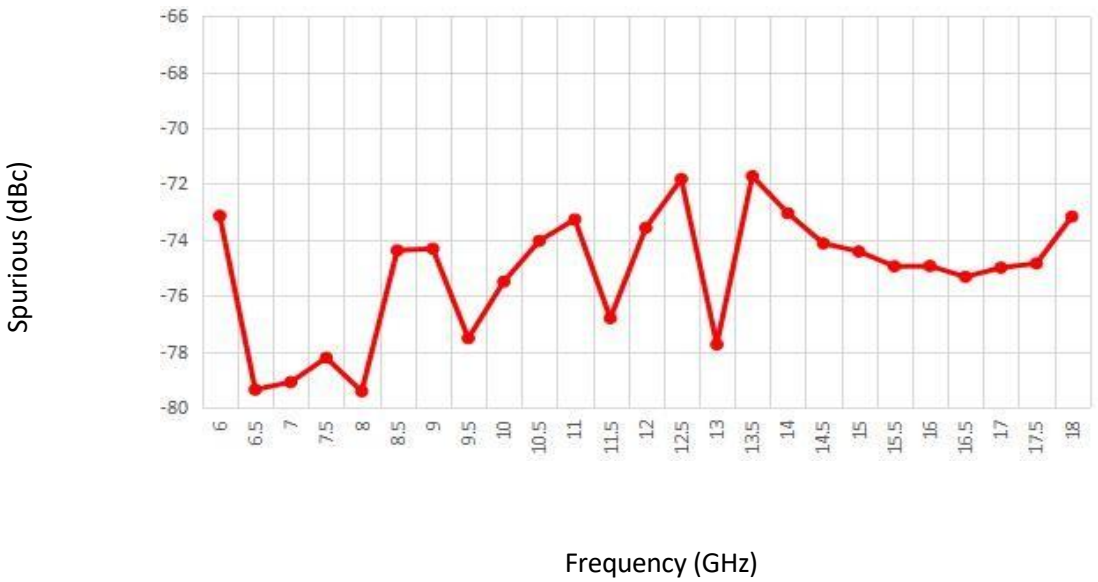
Pout (dBm)

Pin (dBm)

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
LF6-S-53	Solid State High Power Amplifier Systems 6- 18GHz ,Gain: 53dB, Psat: 53dBm, 220V AC, Built in Fan Cooling	Rev.1.0