



HIGH PROWER AMPLIFIER SYSTEM (Solid State)

30-80 MHz, 53dB Gain, 220V AC

Model: LF-3080M-53-BC

PRODUCT OVERVIEW:

LF-3080M-53-BC is a solid state high power amplifier system, which provides high output power and high gain across the 30 to 80 MHz frequency range. The amplifier features a built-in 220V power supply, making it easy to use in most lab environments. This model features thermal self-protection, preventing damage to the amplifier and providing added reliability.

KEY FEATURES:

- Wide Band: 30-80MHz
- Gain: 53dB Min
- PSAT Output Power: 53dBm Min
- Protection: Over TEM, over voltage, over current, over VSWR protection
- 50 Ohm Matched Input / Output

ELECTRICAL SPECIFICATIONS:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	30-80			MHz
Small Signal Gain	SSGP	53	54		dB
Gain flatness	ΔGL		± 1	± 1.5	dB
Gain adjust Range	ΔGR		31.5		dB
Gain adjust Step	ΔGS		0.5		dB
Output PSAT	Psat	53	54		dBm
Output P1dB	P1dB	50	51		dBm
Spurious @ Pout=200W	Spur			-60	dBc
Harmonics @ Pout=200W	HAM		-15	-10	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac		220		V AC
AC Supply Current	Iac		3		A
Power Consumption	Pdiss		660		W
Impedance	I/O-IMP	50			Ohms

MECHANICAL SPECIFICATIONS:

Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Forward/Reverse Coupling	-	
Communication Connector	DB15	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 3U*550	mm
Weight	≤25	Kg

ABSOLUT MAXIMUM RATINGS:

Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

KEY FEATURES:

Parameter	Advantages
Control functions	Power setting On/Off
Protection functions	1. Over TEM 2. Over voltage 3. Over current 4. Over VSWR
Remote control	LAN TCP/IP
Cooling system	Built in Cooling system, forced air cooling

ENVIRONMENTAL CONDITIONS:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-45		+65	°C
Relative humidity		95		%
Altitude	10,000			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			

ORDERING INFORMATION:

Part number	Description	Revision
LF-3080M-53-BC	High Power Amplifier System (Solid State) 30-80MHz, Gain: 53dB, PSAT: 53 dBm, 220V AC, Built in Fan Cooling	1.0.