AC- POWER AMPLIFIER

MPC0506.31
0.5GHz-6GHz

Features

- ✓ *Broad band operation from 0.5 to 6 GHz*
- ✓ *Low VSWR, unconditional stable*
- ✓ *Convenient AC Power Input. (AC 110V/220V)*
- ✓ *SMA female connector I/O*
- ✓ *Gain: 33dB Typical*
- ✓ *Operating temperature -40~+85°C*
- ✓ *Storage temperature -50~+105°C*

Specifications

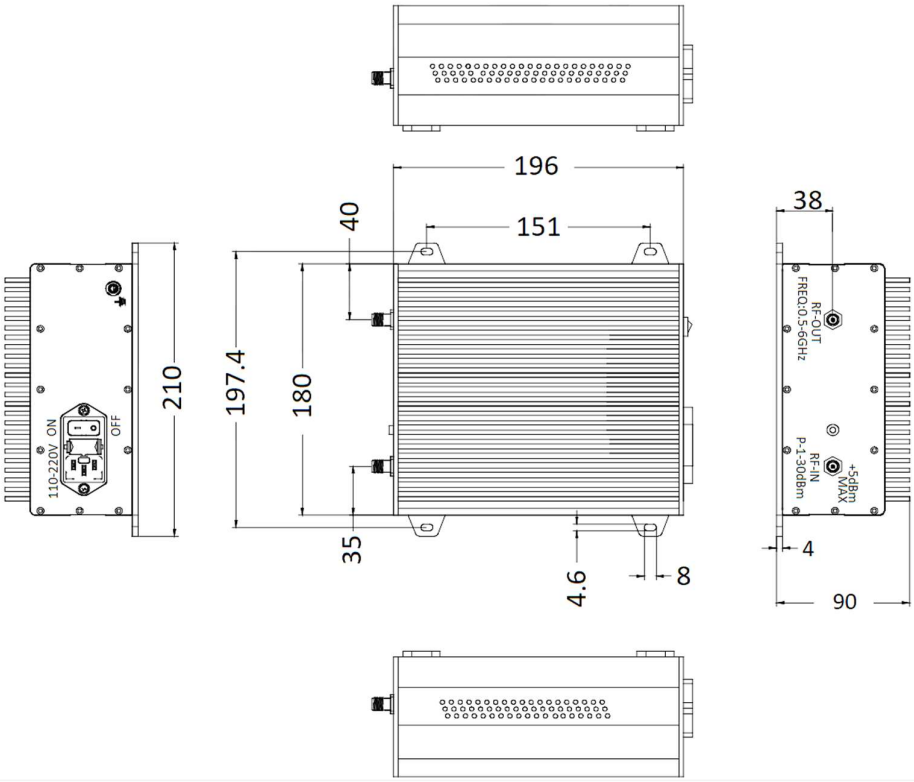
Parameters	Minimum	Typical	Maximum	Minimum	Typical	Maximum
Frequency Range	0.5GHz		4GHz	4GHz		6GHz
Gain	30 dB	33 dB		28 dB	31 dB	
Gain Flatness		±2.0 dB			±2.0 dB	
Gain Variation Over Temperature (-40℃~+85℃)		±1.5 dB			±1.5 dB	
Input VSWR		1.8:1	2.3:1		1.8:1	2.2:1
Output 1 dB Compression Point (P1dB)	28 dBm	30 dBm		28 dBm	30 dBm	
Saturated Output Power (Psat)		31 dBm			31 dBm	
Isolation S12		-60 dB			-60 dB	
Operating Temperature	-40°C		+85°C			
Storage Temperature	-50°C		+105°C			
Current @ AC 220V		/			/	
RF In/Out connectors	SMA female					
Size (mm)	197.4mmx196mmx90mm					

NOTES:
1. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
2. CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY

RoHS

Tolerance: X= ±0.5

Outline Drawing (Unit: mm)



Absolute Maximum Ratings	
Operating Voltage	110~240VAC
RF Input Power(RFIN)	+5dBm
Storage Temperature	-50~+105°C

Biasing Up Procedure	
Step 1	Connect input and output with 50 Ohm source and load with in band return loss better than 10dB
Step 2	Connect AC Plug
Step 3	Flip switch to “ON” position

Power OFF Procedure	
Step 1	Flip switch to “OFF” position
Step 2	Remove AC Plug
Step 3	Remove RF Connection

Environmental Specifications	
Operational Temperature	-40~+85°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 35c, 95%RH at 40ºc
Shock	20G for 11msec half sine wave, 3 axis both directions

**Note: Maximum RF input power is set to assure safety of amplifier. Input power may be increased at own risk to achieve full power of amplifier. Please reference gain and power curves.

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