

## AMP0102-120M SOLID STATE HIGH POWER AMPLIFIER

### FEATURES

Class AB linear GaN design  
Instantaneous wide bandwidth  
Suitable for all single channel modulations standards  
Built-in protection circuits  
High reliability and ruggedness

### ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1000 - 2000 MHz	
Power Output	120 Watt Min , P1: 50 W Min	CW
Power Gain	50 dB Min	
Power Gain Flatness	3.0dB p-p Max	Constant input power
Input / Output VSWR	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	37dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 - 30 VDC	
Current Consumption	12 Amp Max	At rated Pout
Max Input Power Protection	+10 dBm	10 Sec without damage
Load VSWR Protection	$\infty : 1$	At rated Pout for 1 minute
Turn On / Off Speed	5 $\mu\text{Sec}$ Max	

### ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

### MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	188 x 91.5 x 27 mm	Excluding Connectors
Weight	902 gr	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

### D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	$I_D @ 20\text{mV}/100\text{mA}$ Typ
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV}$ Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

# AMP0102-120M SOLID STATE HIGH POWER AMPLIFIER

## OUTLINE DRAWING

