

# AMP1006000-FUNC-50W

## Product Features

- Frequency range from 100 ~ 6000MHz for 10-300M bandwidth
- Class AB GaN design
- Instantaneous wide bandwidth
- 50 Ohm Input/Output impedance
- Small size and Light weight
- High reliability and Ruggedness
- Ultra-wide digital interference source

## Description

The *AMP1006000-50W-28V-FUNC* is designed for general purpose. Operating frequency range is from 100~6000MHz,Customize any 10-300 MHz bandwidth.Gallium Nitride on GaN Technology is used and attached on a copper sub carrier.Improved thermal handling by patented technology.

## Electrical Specifications @ $V_{DC}=24-32V$ (Wide voltage input) , $T_C=50^{\circ}C$ , 50 $\Omega$ System

PARAMETER	UNIT	MIN	TYP	MAX	SYMBOL
Operating Frequency range	MHz	100	-	6000	F <sub>O</sub>
Operating Bandwidth	MHz	-	150	-	BW
Peak Output Power @CW Signal	W	-	50	-	P <sub>SAT</sub>
Input Power	dBm	-	-	-	P <sub>IN</sub>
Maximum Input Power @Without Damage	dBm	-	-	-	P <sub>IN, MAX</sub>
Power Gain @Input Power 0dBm	dB	-	47±3	-	G <sub>P</sub>
Gain Flatness @Input Power 0dBm	dB	-	-	±1	ΔG <sub>P</sub>
Efficiency	%	50	52	55	E <sub>FF</sub>
Harmonics 1 to N @Output Power 50W	dBc	12	13	15	H <sub>N</sub>
Spurious Level	dBc	60	-	-	Spur
Input VSWR	dB	-	-	-	VSWR
Output VSWR	dB	-	-	2:1	VSWR
Operating Voltage	V	24	28	32	V <sub>DC</sub>
Current Consumption @Output Power50W	A	-	3.5	-	I <sub>DC</sub>

## Environmental Specifications

PARAMETER	UNIT	RATING	SYMBOL
Operating Case Temperature	°C	-20 ~ 85	T <sub>C</sub>
Storage Temperature	°C	-40 ~ 105	T <sub>STG</sub>
Relative Humidity(Non-condensing)	RH	95	%

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## Operating Voltages

PARAMETER	UNIT	NOMINAL VOLTAGE	VOLTAGE ACCURACY	SYMBOL
Operating Voltage	V	24-32	± 2%	V <sub>DC</sub>
HPA Enable Voltage	V	5-32		V <sub>DC</sub>
Current Monitor Voltage	V	-		
Temp Monitor Voltage	V	-		

## Mechanical Specifications

PARAMETER	UNIT	TYP
Mass	kg	0.5
Dimension	mm	115.3 x 63.2 x 22.0 (Without Connectors)
RF Connector	-	MCX Female : RF Input
		N Female : RF Output
DC Connector	-	Power Line, Male : Supply
Cooling		External Heat-sink Required

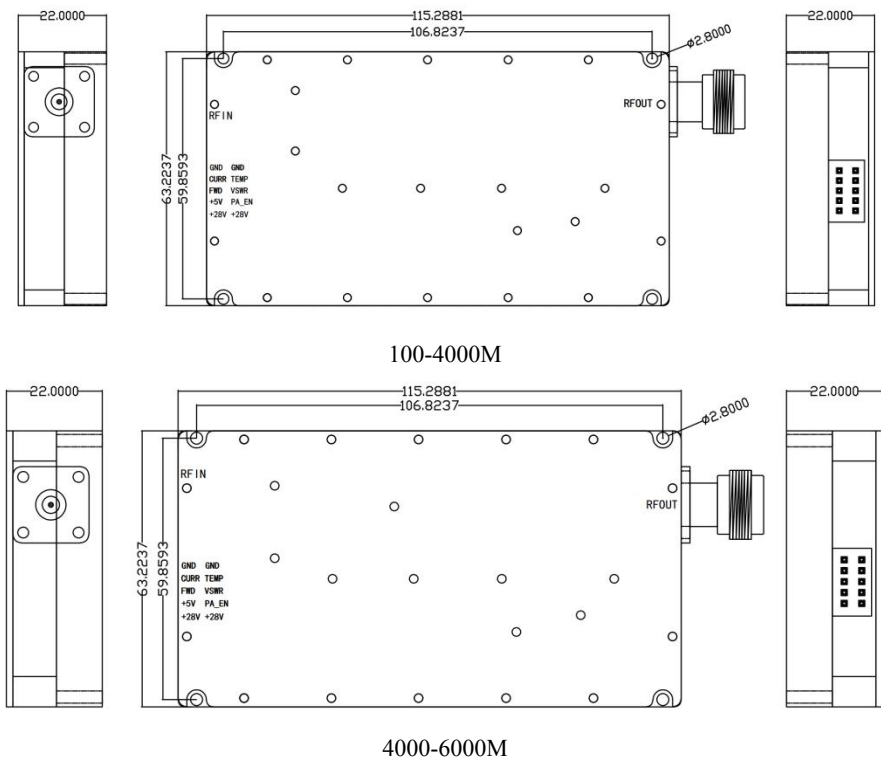
## DC INTERFACE CONNECTOR – [Hybrid D-Sub 10-Pin, Male]

Pin#	Description	Specifications
1	GND	Ground
2	TEMP	Analog voltage relative to Module's Temperature@10mV/°C
3	VSWR	Voltage standing wave alarm
4	PA_EN	Amplifier Enable:TTL Logic High(3.3V/ON、 0V/OFF)
5	+28	+28VDC
6	GND	Ground
7	CURR	Analog voltage relative to IDD@100mV per Ampere
8	FWD	Forward power detection@50mV/1dB
9	+5V	External power supply:5V
10	+28V	+28VDC

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## Outline Drawing

\* Unit: mm[inch] | Tolerance  $\pm 0.2$ [.0078]



## SideView[3D]



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