

# Wideband Amp Pallet

## RWP4060100-50



### Product Features

- Frequency from 4000 ~ 6000MHz
- Class AB GaN design
- Instantaneous wide bandwidth
- 50 Ohm Input/Output impedance
- Small size and Light weight
- High reliability and Ruggedness



### Description

The RWP4060100-50 is designed for general purpose. Operating frequency range is from 4000~6000MHz. Gallium Nitride on SiC Technology is used and attached on a copper sub carrier. Improved thermal handling by patented technology.

### Electrical Specifications @ $V_{DC}=36V$ , $T_C=40^{\circ}C$ , 50 $\Omega$ System

PARAMETER	UNIT	MIN	TYP	MAX	SYMBOL
Operating Frequency	MHz	4000	-	6000	F <sub>O</sub>
Operating Bandwidth	MHz	-	2000	-	BW
Peak Output Power @CW Signal	W	100	110	-	P <sub>SAT</sub>
Input Power	dBm	-	0	-	P <sub>IN</sub>
Maximum Input Power @Without Damage	dBm	-	-	7	P <sub>IN, MAX</sub>
Power Gain @Input Power 0dBm	dB	50	-	-	G <sub>P</sub>
Gain Flatness @Input Power 0dBm	dB	-	-	±1.5	ΔG <sub>P</sub>
Small Signal Gain @ Input Power -20dBm	dB	58	62	-	G <sub>S</sub>
Efficiency	%	-	25	-	E <sub>FF</sub>
Harmonics 1 to N @Output Power 100W	dBc	10	-	-	H <sub>N</sub>
Spurious Level	dBc	60	-	-	Spur
Input VSWR	-	-	-	2:1	VSWR
Operating Voltage	V	-	28	-	V <sub>DC</sub>
Quiescent Current	A	-	4.5	6	I <sub>DQ</sub>
Current Consumption @Output Power 100W	A	-	10.5	13	I <sub>DC</sub>

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### Environmental Specifications

PARAMETER	UNIT	RATING	SYMBOL
Operating Case Temperature	°C	-30 ~ 80	T <sub>C</sub>
Storage Temperature	°C	-40 ~ 105	T <sub>STG</sub>
Relative Humidity(Non-condensing)	RH	95	%

### Absolute Maximum Ratings

PARAMETER	UNIT	RATING	SYMBOL
RF Input Power	dBm	+7	P <sub>IN</sub>
Supply Voltage	V	40	V <sub>DC</sub>
Load Mismatch Value	-	3:1 @ any angel & continuous amplitude	-

### Operating Voltages

PARAMETER	UNIT	NOMINAL VOLTAGE	VOLTAGE ACCURACY	SYMBOL
Operating Voltage	V	36	± 2%	V <sub>DC</sub>
HPA Enable Voltage	V	Low(0V) : PA OFF, High(5V) : PA ON		
Current Monitor Voltage	V	Output Voltage 2V@10A(0.2V/1A)		
Temp Monitor Voltage	V	Output Voltage 0.75V@25°C (1°C/0.01V)		

\* HPA Enable : 500ms Delay

### HPA Operating Sequence

HPA Turn On	HPA Turn Off
1. Pin A2 : +36V On	1. RF Off
2. Pin 3 : HPA Enable On	2. Pin 3 : HPA Enable Off
3. RF On	3. Pin A2 : +36V Off

\* It is recommended to follow the sequence of bias application as in the above table. However, there is an internal protection circuit that prevents the possible damages that may be occurred from a different sequence of bias applications.

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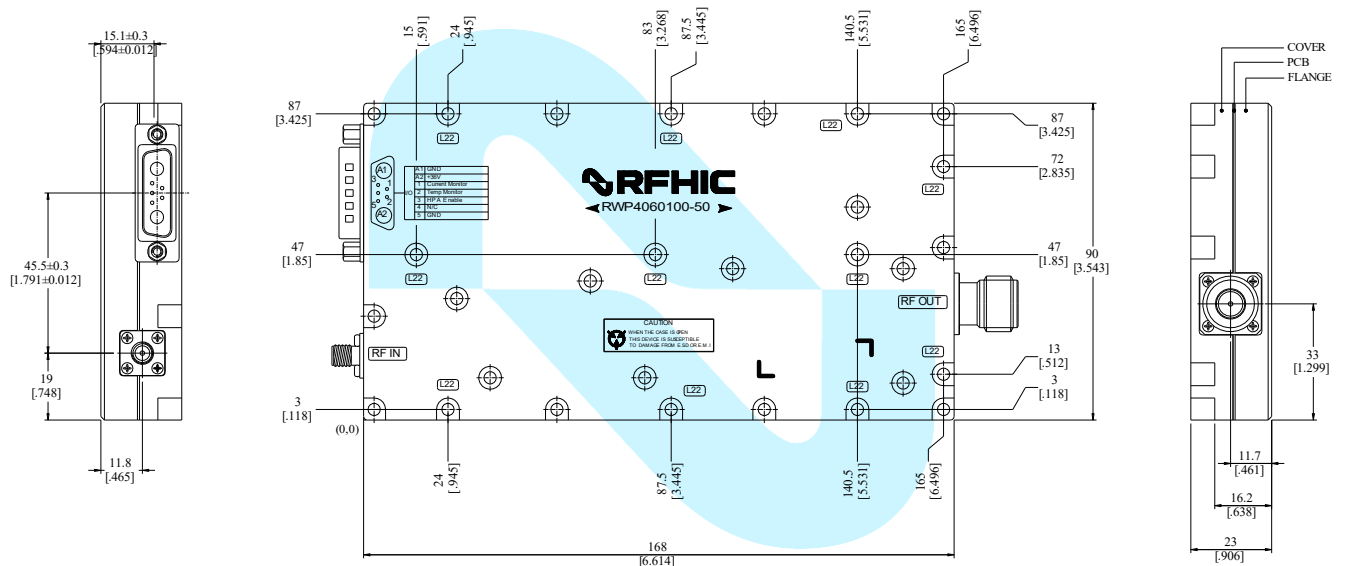


### Mechanical Specifications

PARAMETER	UNIT	TYP
Mass	kg	0.72(TBD)
Dimension	mm	168 x 90 x 23 (Without Connectors)
RF Connector	-	SMA Female : RF Input
		N Female : RF Output
DC Connector	-	D-Sub 7-Pin(7W2), Male : Supply
Cooling		External Heat-sink Required

### Outline Drawing

\* Unit: mm[inch] | Tolerance  $\pm 0.3$ [.012]



### Pin Description

Pin No	Description	Pin No	Description
A1	GND	1	Current Monitor
A2	V <sub>DS</sub> (+36V)	2	Temp Monitor
		3	HPA Enable
		4	N/C
		5	GND

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### Revision History

Part Number	Release Date	Version	Modification	Data Sheet Status
RWP4060100-50	2026.05.21	0.1	-	Preliminary



#### Certification

This product is manufactured by a company that is certified for the AS9100D quality management system.

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