

# Preliminary

## Wideband Amp Pallet

### RRK2060050-48



#### Product Features

- Frequency from 2000 ~ 6000MHz
- Class AB GaN design
- Instantaneous wide bandwidth
- 50 Ohm Input/Output impedance
- Small size and Light weight
- High reliability and Ruggedness



#### Description

The RWP2060050-48 is designed for general purpose. Operating frequency range is from 2000~6000MHz.

Gallium Nitride on SiC Technology is used and attached on a copper sub carrier.

Improved thermal handling by patented technology.

#### Electrical Specifications @ V<sub>DC</sub>=28V, T<sub>C</sub>=50°C, 50Ω System

PARAMETER	UNIT	MIN	TYP	MAX	SYMBOL
<b>Operating Frequency</b>	MHz	2000	-	6000	F <sub>O</sub>
<b>Operating Bandwidth</b>	MHz	-	4000	-	BW
<b>Peak Output Power @CW Signal</b>	W	50	65	-	P <sub>SAT</sub>
<b>Input Power</b>	dBm	-	0	-	P <sub>IN</sub>
<b>Maximum Input Power @Without Damage</b>	dBm		-	7	P <sub>IN, MAX</sub>
<b>Power Gain @Input Power 0dBm</b>	dB	-	48	-	G <sub>P</sub>
<b>Gain Flatness @Input Power 0dBm</b>	dB	-	-	±1.5	ΔG <sub>P</sub>
<b>Efficiency</b>	%	-	25	-	E <sub>FF</sub>
<b>Harmonics 1 to N @Output Power 50W</b>	dBc	10	-	-	H <sub>N</sub>
<b>Spurious Level</b>	dBc	60	-	-	Spur
<b>Input VSWR</b>	dB	-	-	2:1	VSWR
<b>Operating Voltage</b>	V	-	28	-	V <sub>DC</sub>
<b>Current Consumption @Output Power 65W</b>	A	-	9.5	-	I <sub>DC</sub>

#### Environmental Specifications

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

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### Operating Voltages

PARAMETER	UNIT	NOMINAL VOLTAGE	VOLTAGE ACCURACY	SYMBOL
Operating Voltage	V	28	± 2%	V <sub>DC</sub>
HPA Enable Voltage	V	TTL Low(0V) : PA OFF, TTL High(5V) : PA ON		
Current Monitor Voltage	V	Output Voltage 1V@10A(0.1V/1A)		
Temp Monitor Voltage	V	Output Voltage 0.75V@25°C (1°C/0.01V)		

### Mechanical Specifications

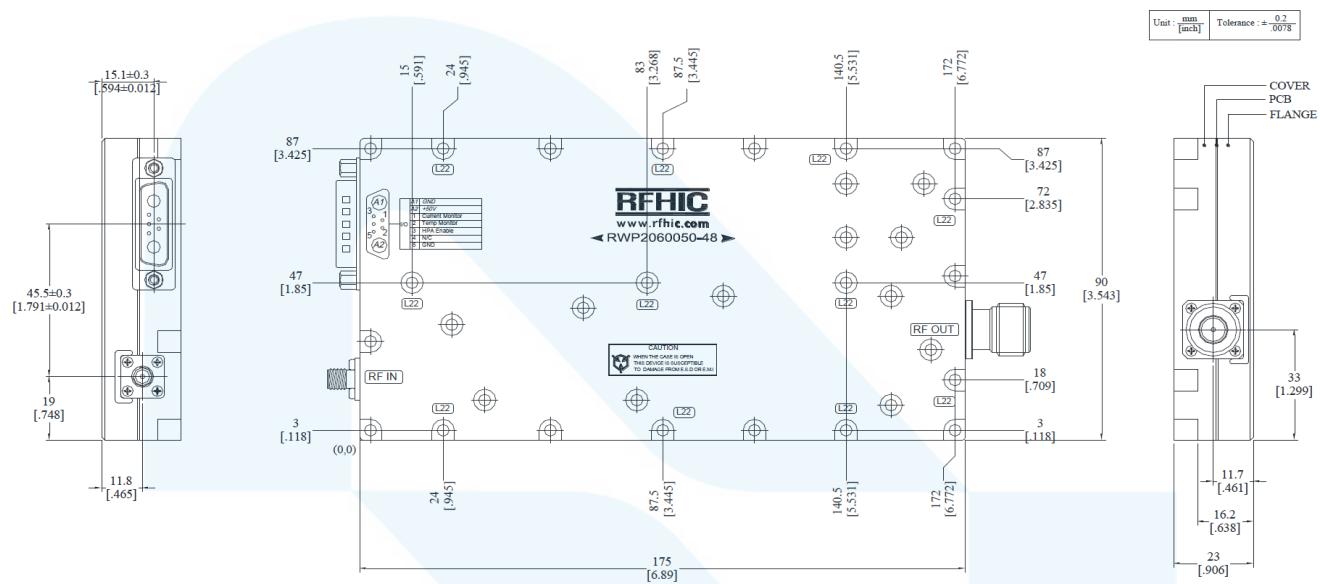
PARAMETER	UNIT	TYP
Mass	kg	0.75
Dimension	mm	175 x 90 x 23 (Without Connectors)
RF Connector	-	SMA Female : RF Input
		N Female : RF Output
DC Connector	-	D-Sub 7-Pin(7W2), Male : Supply
Cooling		External Heat-sink Required

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**Outline Drawing**

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



**Pin Description**

Pin No	Description	Pin No	Description
A1	GND	1	Current Monitor
A2	V <sub>DS</sub> (+28V)	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
RWP2060050-48	2020.01.22	0.1	-	Preliminary
RWP2060050-48	2026.01.09	0.2	Specification Updated	Preliminary

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