

## 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 @ $V_{DC}=28V$ , $T_C=50^{\circ}C$ , 50 $\Omega$ System

PARAMETER	UNIT	MIN	TYP	MAX	SYMBOL
Operating Frequency	MHz	2000	-	6000	$F_O$
Operating Bandwidth	MHz	-	4000	-	BW
Peak Output Power @CW Signal	W	50	65	-	$P_{SAT}$
Input Power	dBm	-	0	-	$P_{IN}$
Maximum Input Power @Without Damage	dBm	-	-	7	$P_{IN, MAX}$
Power Gain @Input Power 0dBm	dB	-	48	-	$G_P$
Gain Flatness @Input Power 0dBm	dB	-	-	$\pm 1.5$	$\Delta G_P$
Efficiency	%	-	25	-	$E_{FF}$
Harmonics 1 to N @Output Power 80W	dBc	10	-	-	$H_N$
Spurious Level	dBc	60	-	-	Spur
Input VSWR	dB	-	-	2:1	VSWR
Output VSWR	dB	-	-	2:1	VSWR
Operating Voltage	V	-	28	-	$V_{DC}$
Current Consumption @Output Power 65W	A	-	9.5	-	$I_{DC}$

## Environmental Specifications

PARAMETER	UNIT	RATING	SYMBOL
Operating Case Temperature	$^{\circ}C$	-20 ~ 85	$T_C$
Storage Temperature	$^{\circ}C$	-40 ~ 105	$T_{STG}$
Relative Humidity(Non-condensing)	RH	95	%

### Operating Voltages

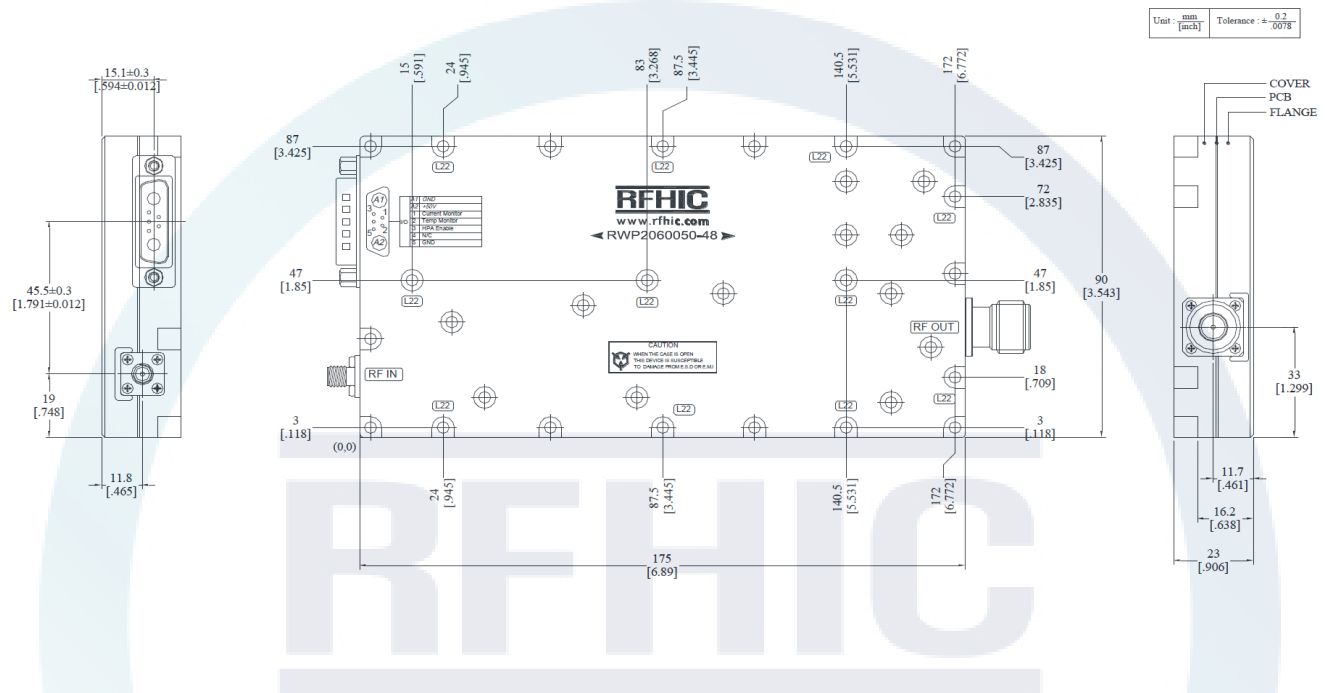
PARAMETER	UNIT	NOMINAL VOLTAGE	VOLTAGE ACCURACY	SYMBOL
Operating Voltage	V	28	± 2%	V <sub>DC</sub>
HPA Enable Voltage	V	TTL Low(0V) : PA OFF, TTL High(5V) : PA ON		-
Current Monitor Voltage	V	Output Voltage 1V@10A(0.1V/1A)		-
Temp Monitor Voltage	V	Output Voltage 0.75V@25°C (1°C/0.01V)		-

### 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

## 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

**Revision History**

Part Number	Release Date	Version	Modification	Data Sheet Status
RWP2060050-48	2020.01.22	0.1	-	Preliminary



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