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_{DC}=28V, T_C=50°C, 50Ω 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	-	-	±1.5	ΔG_P
Efficiency	%	-	25	-	E_{FF}
Harmonics 1 to N @Output Power 50W	dBc	10	-	-	H_N
Spurious Level	dBc	60	-	-	Spur
Input 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	°C	-20 ~ 85	T_C
Storage Temperature	°C	-40 ~ 105	T_{STG}
Relative Humidity(Non-condensing)	RH	95	%

RRK2060050-48

Operating Voltages

PARAMETER	UNIT	NOMINAL VOLTAGE	VOLTAGE ACCURACY	SYMBOL
Operating Voltage	V	28	± 2%	V_{DC}
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℃ (1℃/0.01V)		

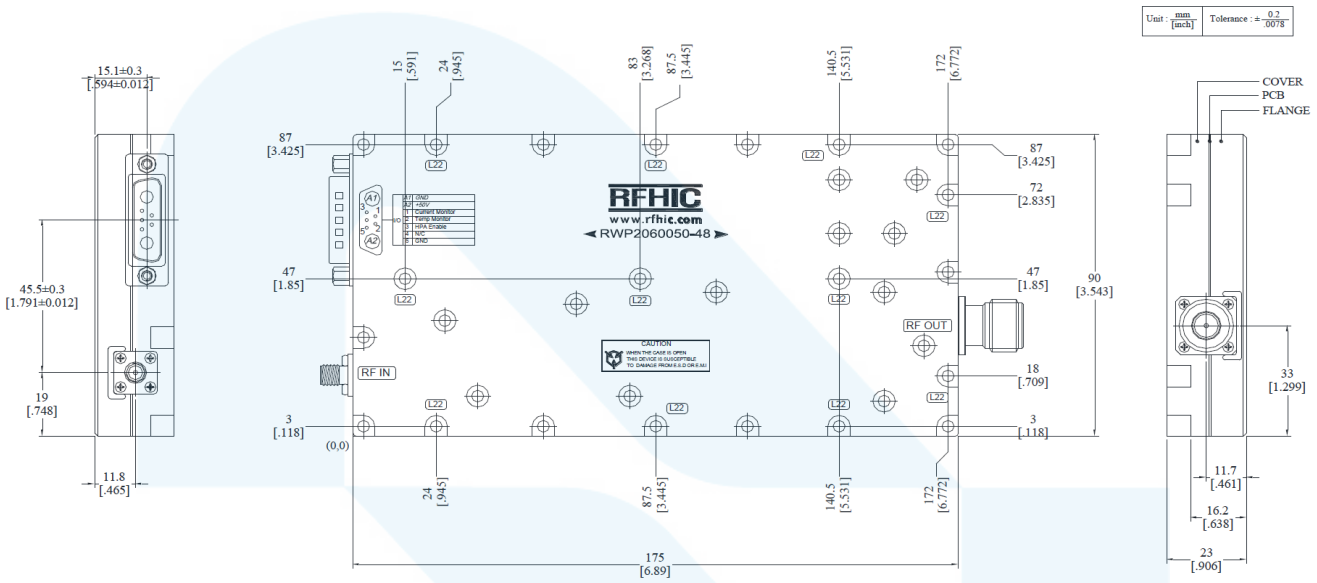
Mechanical Specifications

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

RRK2060050-48

Outline Drawing

* Unit: mm[inch] | Tolerance ±0.2[.0078]



Pin Description

Pin No	Description	Pin No	Description
A1	GND	1	Current Monitor
A2	V_{DS}(+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
RWP2060050-48	2026.01.09	0.2	Specification Updated	Preliminary