

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 RWP2060080-50 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 @ $V_{DC}=40V$, $T_C=50^{\circ}C$, 50 Ω 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	80	100	-	P_{SAT}
Input Power	dBm	-	0	-	P_{IN}
Maximum Input Power @Without Damage	dBm	-	-	7	$P_{IN, MAX}$
Power Gain @Input Power 0dBm	dB	-	50	-	G_P
Gain Flatness @Input Power 0dBm	dB	-	-	± 1.5	ΔG_P
Efficiency	%	-	22	-	E_{FF}
Harmonics 1 to N @Output Power 80W	dBc	10	-	-	H_N
Spurious Level	dBc	60	-	-	Spur
Input VSWR	dB	-	-	2:1	VSWR
Operating Voltage	V	-	40	-	V_{DC}
Current Consumption @Output Power 100W	A	-	11	-	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

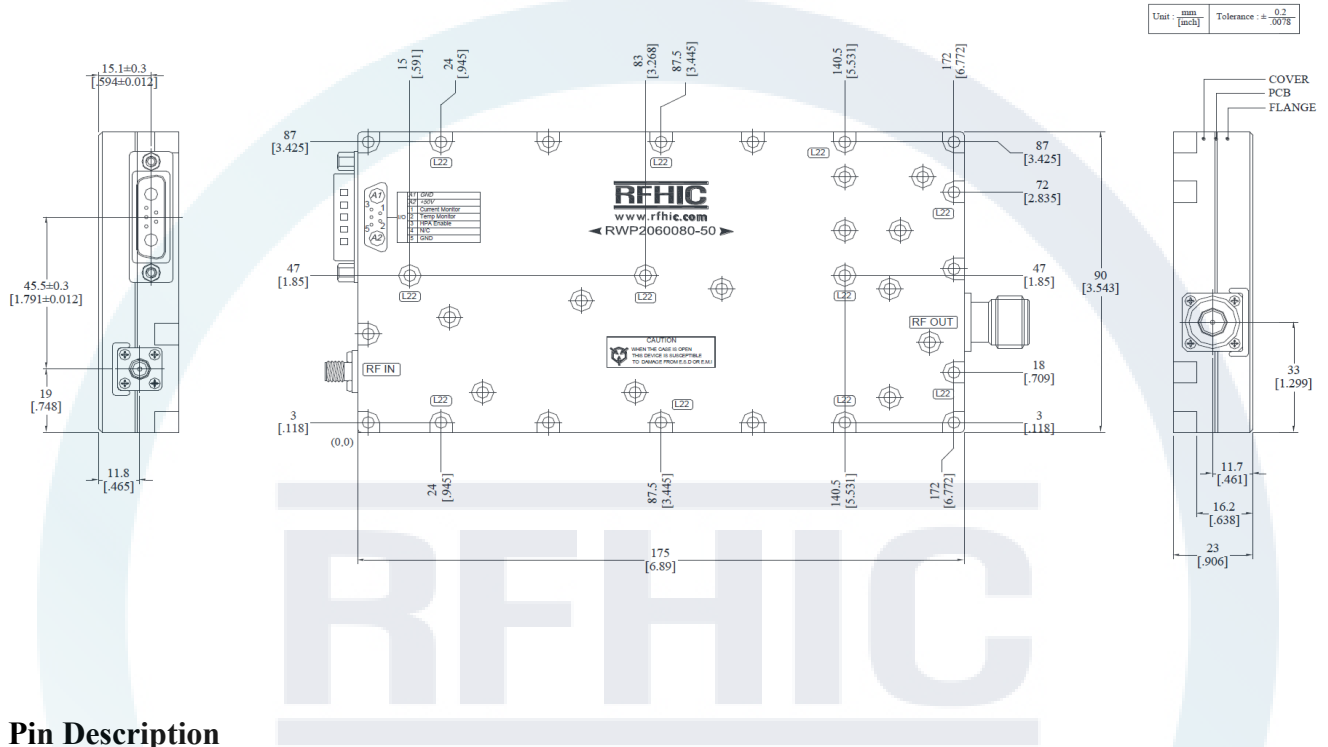
PARAMETER	UNIT	NOMINAL VOLTAGE	VOLTAGE ACCURACY	SYMBOL
Operating Voltage	V	40	± 2%	V _{DC}
HPA Enable Voltage	V	TTL Low(0V) : PA OFF, TTL High(5V) : PA ON		-
Current Monitor Voltage	V	Output Voltage 1V@10A(0.1V/1A)		-
Temp Monitor Voltage	V	Output Voltage 0.75V@25°C (1°C/0.01V)		-

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: ± 0.2 [.0078]



Pin Description

Pin No	Description	Pin No	Description
A1	GND	1	Current Monitor
A2	V _{DS} (+40V)	2	Temp Monitor
		3	HPA Enable
		4	N/C
		5	GND

Revision History

Part Number	Release Date	Version	Modification	Data Sheet Status
RWP2060080-50	2020.01.22	0.1	-	Preliminary
RWP2060080-50	2020.07.09	0.2	Modification of Specification	Preliminary



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