

**Preliminary**  
**Wideband Power Amplifier**

**RWP5872050-10**



**Product Features**

- Frequency from 5800 to 7200 MHz
- Class AB GaN HEMT Design
- Typ. 50W C.W.
- 40% Efficiency at CW 100W
- 50 ohm Input / Output impedance matched
- Pb Free / RoHS Standard

**Applications**

- Radar-Systems
- Jamming-Systems
- Drones/UAVs Systems
- Satellite Communication



**Description**

RFHIC's GaN Power Amplifier Pallet is Flanged type product which includes all matching for the convenience of customers. RWP5872050-10 is wide band Amp used for up 5800 to 7200 MHz.

**Electrical Specifications @  $V_{DD} = 32V$ ;  $T_c = 45^\circ C$ ;  $Z_s = Z_L = 50\Omega$**

PARAMETER	UNIT	MIN	TYP	MAX	CONDITION
Frequency	MHz	5800		7200	-
Power Gain	dB	34	35		@ $P_{IN} = 12dBm$
Power Gain Flatness @ $P_{in} 12dBm$	dB		$\pm 0.5$	$\pm 1$	@ $P_{IN} = 12dBm$
Input Power ( $P_{IN}$ )	dBm		12	15	@ $P_{out} = 50W$
Output Power ( $P_{SAT}$ )	W	46	47		-
Input / Output Return Loss	dB	-7	-10		S11 / S22
Efficiency	%	40	44.8		@ $P_{out} = 50W$
Supply Voltage	V		32		
Quiescent Current ( $I_{DQ}$ )	A		0.3	0.5	$V_{DD} = 32.0V$
Current Consumption ( $I_{DD}$ )			3.5	4	@ $P_{out} = 50W$
Spurious Signals	dBc		-70		

**NOTE**

\*Measured for the  $P_{out} = 50W$ ,  $T = 45^\circ C$ ,  $V_{DD} = +32V$ ,  $50\Omega$  system

**I/O Connector (YDAW200-12)**

Pin NO.	UNIT	RATING
1, 2, 3, 4	V	VDD +32V
5, 6, 7, 8		GND
9	TTL	VSWR Alarm @ VSWR $\geq$ 2.5 :1
10	V	0-10V dc Analog
11	V	0 ~ 3V (LM50CIM)
12	TTL	On : TTL "Low"(Enable) Off : TTL "High"

**Absolute Maximum Ratings**

PARAMETER	UNIT	RATING
Input RF Power	dBm	0
Supply Voltage	V	40
Load Mismatch Value	-	3:1 @all load phase

\*Input Signal Condition : CW 1-Tone

**Environmental Characteristics**

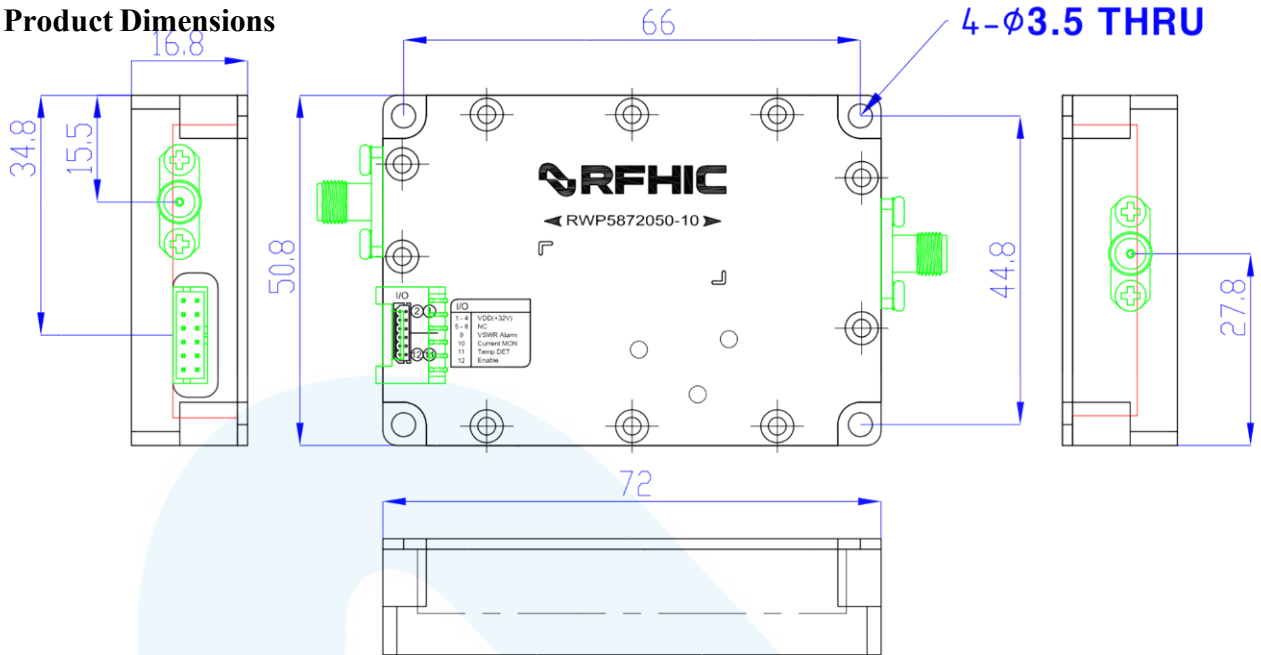
PARAMETER	UNIT	MIN	TYP	MAX	Condition
Operating Flange Temperature	°C	-30	-	+60	
Storage Temperature	°C	-40	-	+85	

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# Wideband Power Amplifier RWP5872050-10



## Product Dimensions



\* Unit: mm[inch] | Tolerance:  $\pm 0.2$ [.008]

## Mechanical Specification

PARAMETER	Units	Value
Dimensions	mm	72 x 150.8 x 16.8
RF Input Connector		SMA(Female)
RF Output Connector		SMA(Female)
I/O Connector		YDMAW200-12
Cooling		External Heat-Sink Required

### NOTE

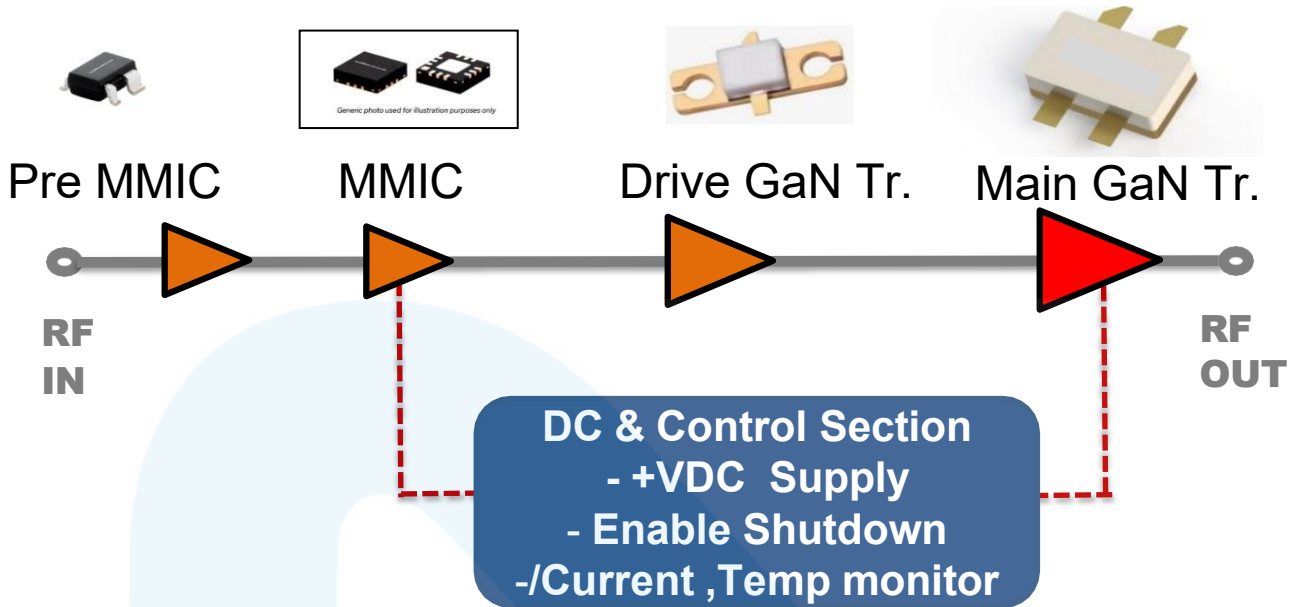
1. Connector position and module mount holes may be subjected change.

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# Wideband Power Amplifier RWP5872050-10



## Block Diagram



## Revision History

Part Number	Release Date	Version	Modification	Data Sheet Status
RWP5872050-10	03.25.2026	0.1	Initial Release	



### Certification

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

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