

### ● Product Features

- 2.4GHz ~ 2.5GHz (ISM band)
- Above 50% efficiency at CW 250W
- Power Control
- Phase Control
- VSWR Tracking Function
- Soft start Function

### ● Applications

- Plasma Lighting System
- RF Heating and Drying
- Solid state Microwave OVEN
- Semiconductor Equipment
- Bio & Health Sciences



### ● Electrical Specification @ $V_{DS} = 32V$ , $T_{CASE} = 50^{\circ}C$ , $50\Omega$ System

Parameter	Symbol	MIN	TYP	MAX	Units
Operating Frequency	$F_O$	2.4	-	2.5	GHz
Bandwidth	-	-	100	-	MHz
CW Output Power	$P_O$	-	54	-	dBm
Output Power Control	-	50	-	250	W
Gain Flatness	$G_F$	-	-	1	dB
Operating Voltage	$V_O$	-	$32 \pm 0.3$	-	V
Current consumption @ $P_{SAT}$	-	-	15.6	-	A
Efficiency @ $P_{SAT}$	Eff	-	50	-	%

### ● Special Function (control Interface: I<sup>2</sup>C)

Parameter	Specification
Power Control	0 ~ 6dB (resolution: 0.5dB)
Phase Control	0 ~ 360° (resolution: 0.5°)
VSWR Tracking Step	100KHz
Operating Method	Manual / Auto

### ● Environmental Characteristics

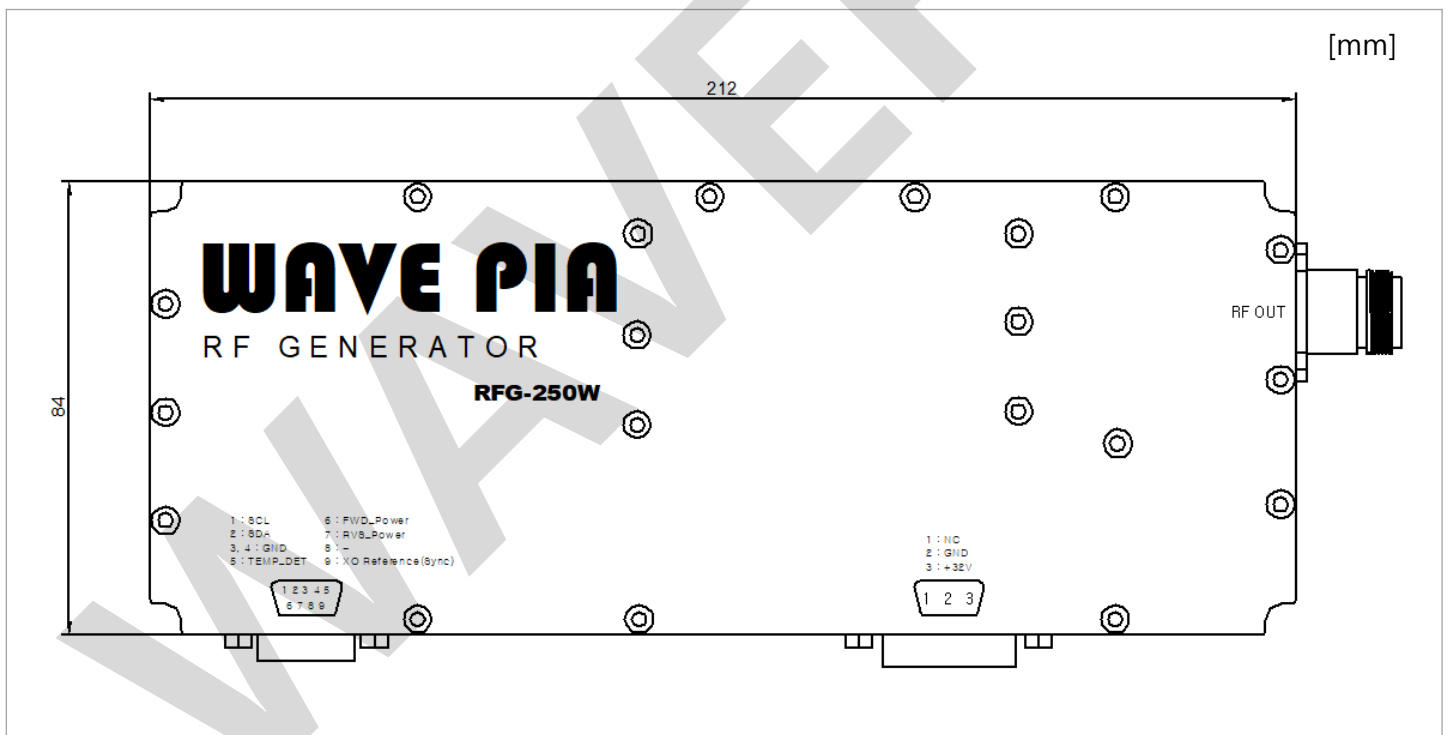
Parameter	Symbol	MIN	TYP	MAX	Units
Operating Frequency	$T_{OP}$	-30	-	60	°C
Storage Temperature	$T_{STG}$	-40	-	105	°C
Relative humidity (Non-condensing)	RH	0	-	95	%

### ● Mechanical Specifications

Parameter	Units	VALUE
Dimensions(L x W x H)	mm	212 x 84 x 30
Weight	Kg	1.05
RF Output Connector	-	N-type Connector(F)
Power Supply Connector	-	3W3 D-sub(F)
I/O connector	-	9pin D-sub(F)
Cooling	-	External Heat-sink & cooling FAN

\* Mechanical specifications can be customized upon customer requests

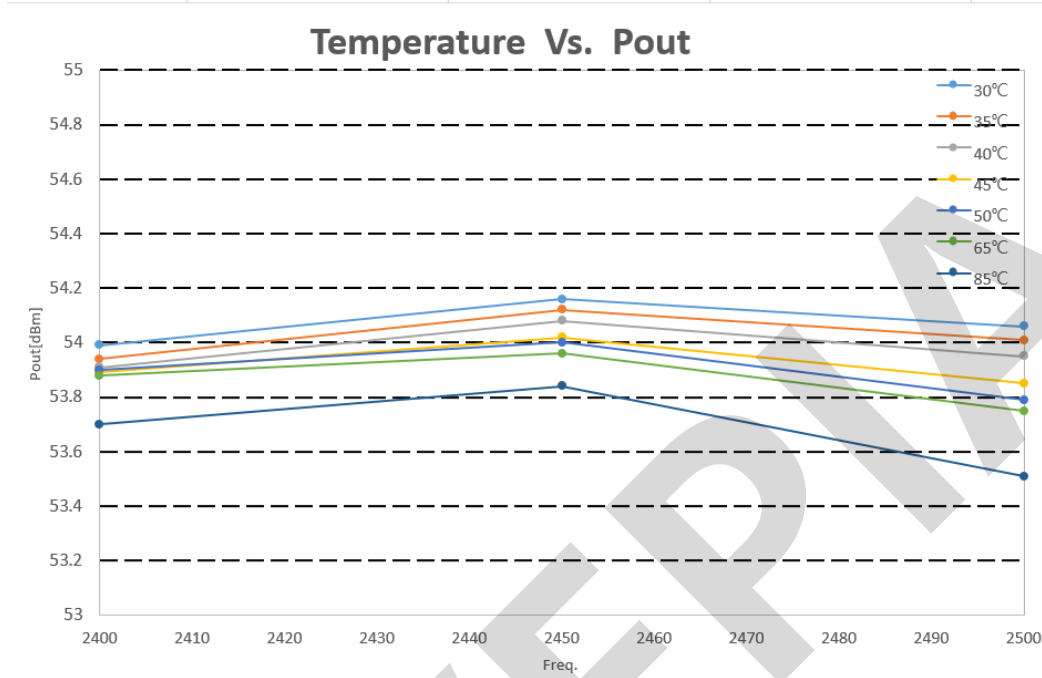
### ● Outline Drawing



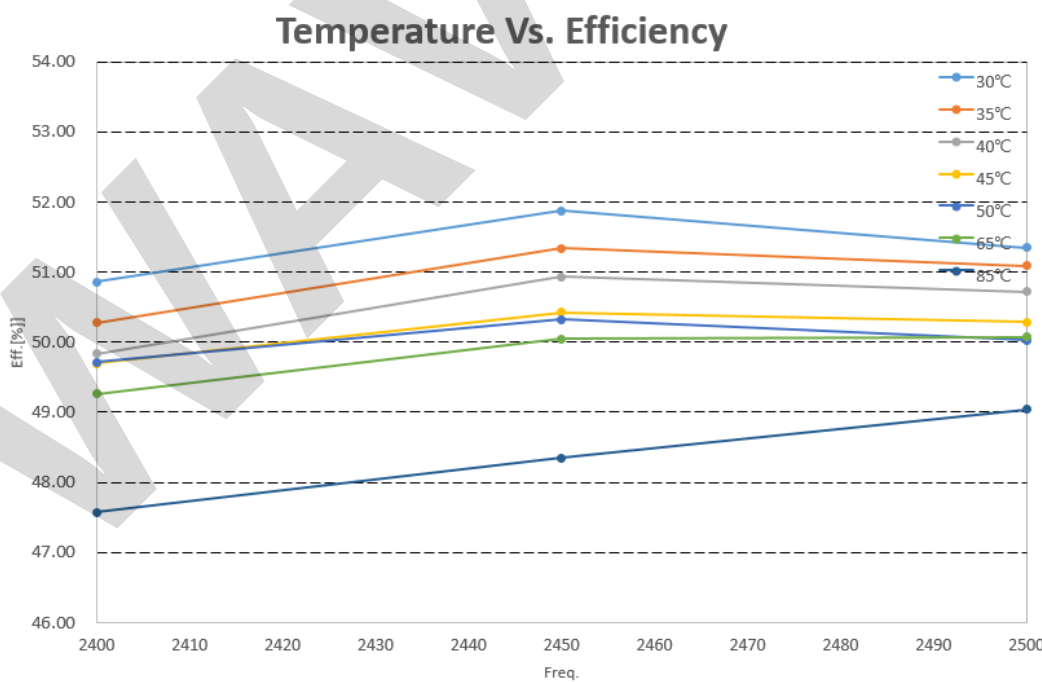
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- **CW Signal Performance ( $T_{SEN}=33\sim 86^{\circ}\text{C}$ )**  
- VDC=32V, I2C Control



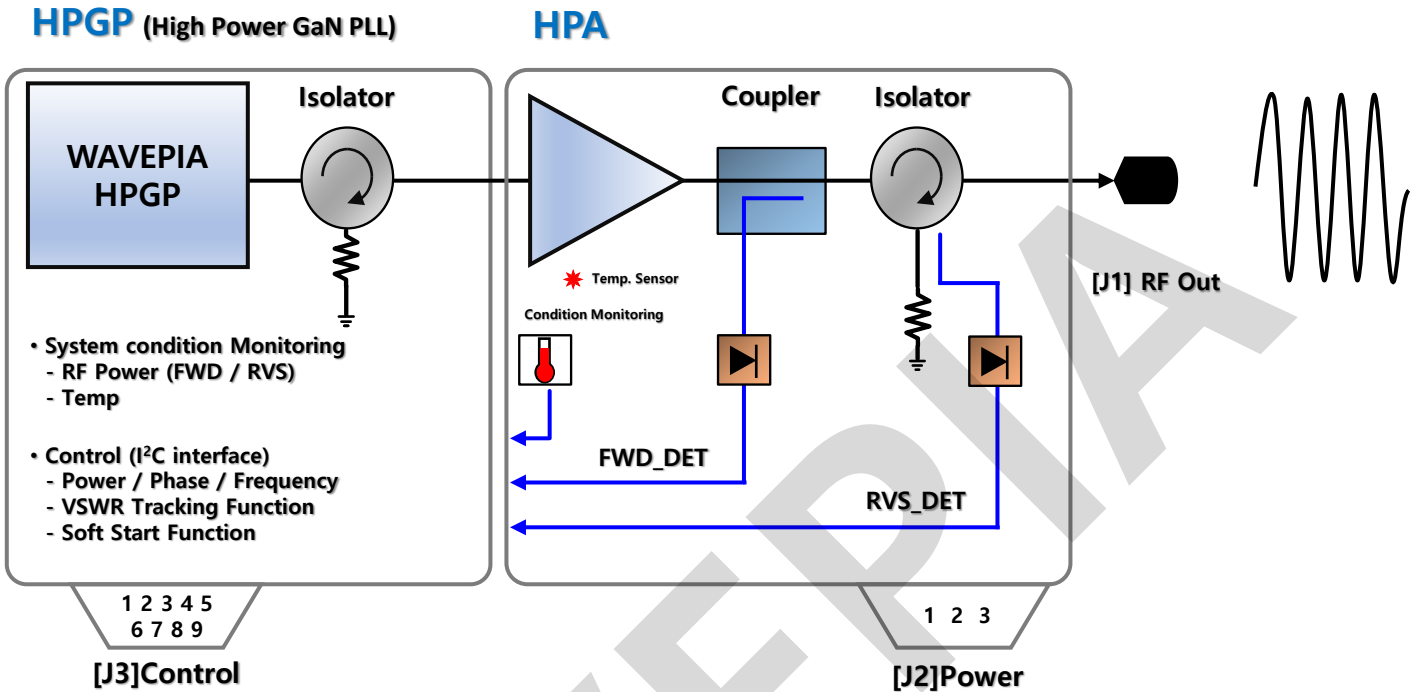
- **CW Signal Performance ( $T_{SEN}=33\sim 86^{\circ}\text{C}$ )**  
- VDC=32V, I2C Control



❖ Based on module internal temperature sensor



● Block Diagram



● Pin Description

Port name	Connector	# of Pin	TYP	MAX	Units
[J1] RF OUT	N-TYPE(F)	1		1: RF Out	
[J2] Power	3W3 Dsub	3		A1: NC A2: GND A3: Supply Voltage	
[J3] I/O Port	9Pin Dsub(F)	9		Interface	1: SCL 2: SCA 3: GND 4: GND
			Option	Monitoring Port	5: TEMP_DET 6: FWD_Power 7: RVS_Powe 8: - 9: XO Reference (Sync)