

Product Features

- Solid-state linear amplifier design
- GaN on SiC HEMT
- Small and light weight
- Wide Band Operation 500~2500MHz
- 50 Ohm Input/Output impedance matched
- Highly reliable and rugged design
- Harsh environmental condition
- High efficiency
- 50W typical Psat

Application

- Broadband communication
- Broadcasting
- General purpose RF amplifier
- Linear applications in the L/S Frequency Bands



Description

The RUP15050-10 is designed for RF system application frequencies from 500MHz to 2.5GHz.

This Pallet Amplifier uses GaN on SiC HEMT technology which performs high breakdown voltage, high linearity, wide bandwidth and high efficiency.

Electrical Specifications @ VDD=+28VDC, T=25°C, 50Ω System

PARAMETER	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	500		2500	MHz
Output Power CW	Psat	70	100		Watt
Output Power @ P3dB G.C.P	P _{3dB}	50	63		Watt
Small Signal Gain	SSG	10.5	11.5	12.5	dB
Small Signal Gain Flatness	ΔG		± 1.5	± 2.0	dB
Input VSWR	S11		2.0:1	2.5:1	-
Harmonics @ P1dB G.C.P	H			-10	dBc
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	VDC	27	28	30	Volt
Supply Current @ Pout = 50W CW	IDD		9.0	10.0	Amp
Supply Current @ Pout = 25W CW	IDD		6.0	7.0	Amp

* Please DO NOT ENTER RF INPUT POWER OVER +43dBm. (to prevent the main from damaging)

Environmental Characteristics

PARAMETER	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	T _c	0		+70	°C
Storage Temperature	T _s	-40		+85	°C

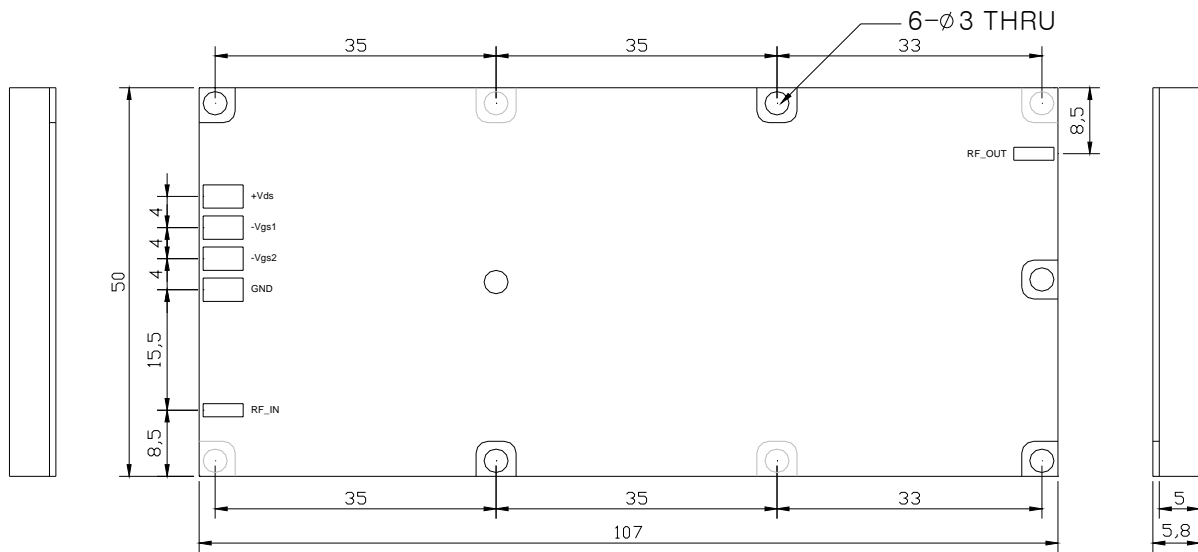
Mechanical Specifications

PARAMETER	Value	Units	Limits
Dimensions (L x W x H)	107.0 x 50.0 x 5.8	mm	Max
RF Connectors In/Out	SMA Female		
Cooling	External Heat sink + airflow		

Interface Connectors

Pin #	Description	Specifications
1	+Vdd	+28 Drain to Source Voltage
2,3	Vgs	Gate to Source Voltage
4	GND	Ground

Outline Drawing



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