

Power Amplifier

2.2-2.3GHz/40dB Gain/47dBm Psat

Model: TLPA2.2G2.3G-40-47

TLPA2.2G2.3G-40-47 is a power amplifier with a minimum small signal gain of 40 dB and a minimum Psat of 47 dBm across the frequency range of 2.2 to 2.3 GHz. The DC power requirement for the amplifier is +28 VDC/5A. The input port and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2.2-2.3GHz
- Gain: 40dB Min
- Output Power Psat: 47dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	2.2		2.3	GHz
Gain	40	43		dB
Gain Flatness		±1	±1.5	dB
Output P1dB	44	45		dBm
Output Psat	47	47.5		dBm
Input VSWR		1.5	2	:1
DC Voltage	26	28	30	V DC
Static Current		1		A
Saturation current		5	6	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Bias	PHD2.0-2x3P	
Size	135*50*20	mm
Weight	300	g

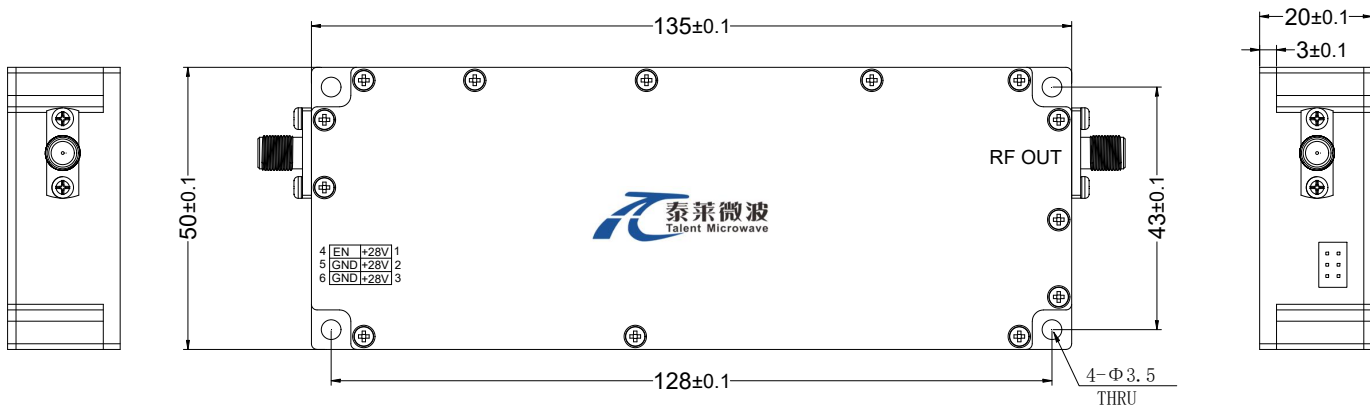
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+10 dBm
ESD sensitivity (HBM)	Class 0, passed 150V



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



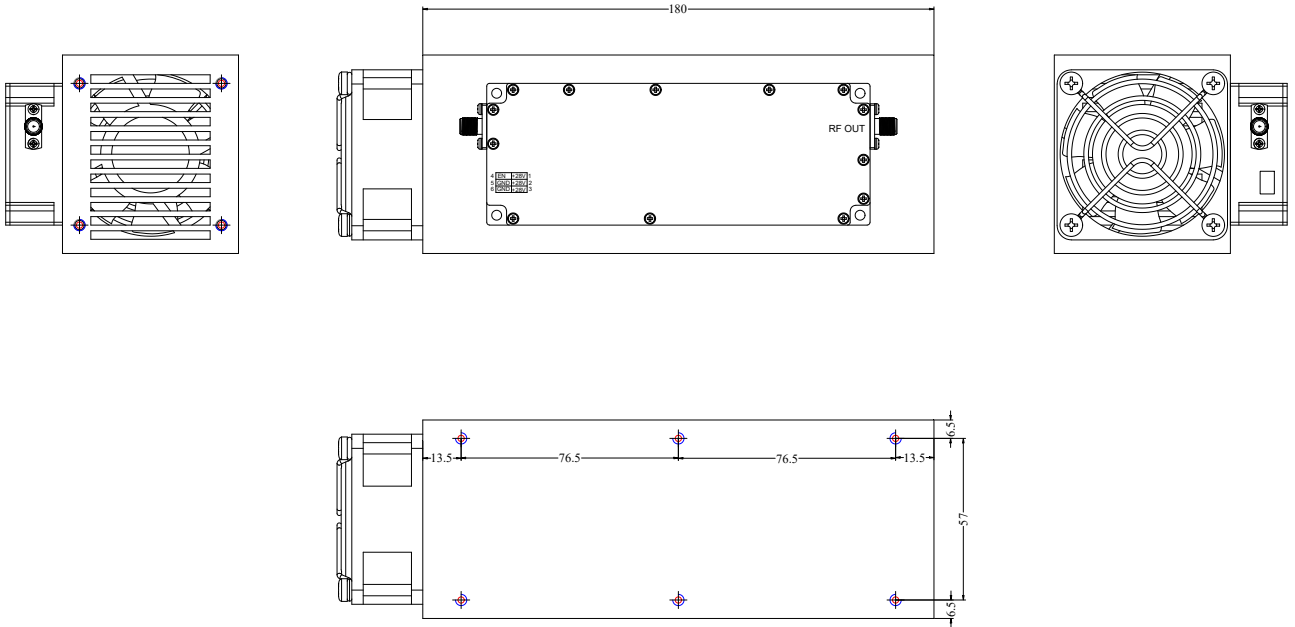
*****Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Fan power supply

Red line	Power supply positive,+24.0-28.0VDC DC current: 0.2A
Black line	Ground

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLPA2.2G2.3G-40-47	Power amplifier 2.2-2.3GHz, Gain:40dB,Psat:47dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA2.2G2.3G-40-47-HS	Power amplifier 2.2-2.3GHz, Gain:40dB,Psat:47dBm,+28V DC,With Heatsink	Rev.1.0