

## Power Amplifier

2.39-2.41GHz/43dB Gain/43dBm Psat

Model: TLPA2.39G2.41G-43-43

TLPA2.39G2.41G-43-43 is a power amplifier with a minimum small signal gain of 43 dB and a minimum Psat of 43 dBm across the frequency range of 2.39 to 2.41 GHz. The DC power requirement for the amplifier is +28 VDC/4 A. The input and output port configuration offers coax adapter structure with SMA female.

### Features:

- Frequency range: 2.39-2.41GHz
- Gain: 43dB Min
- Output Power Psat: 43dBm 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	2.39		2.41	GHz
Small Signal Gain	43	45		dB
Gain Flatness		±0.5		dB
Output Psat	43	43.5		dBm
Spurious			-50	dBc
Harmonic		-15	-10	dBc
Input VSWR			2	:1
DC Voltage		28		V DC
DC Supply Current		4		A
Impedance		50		Ohms

### Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	140*80*20(Without heatsink) 161.33*90*61(With heatsink)	mm

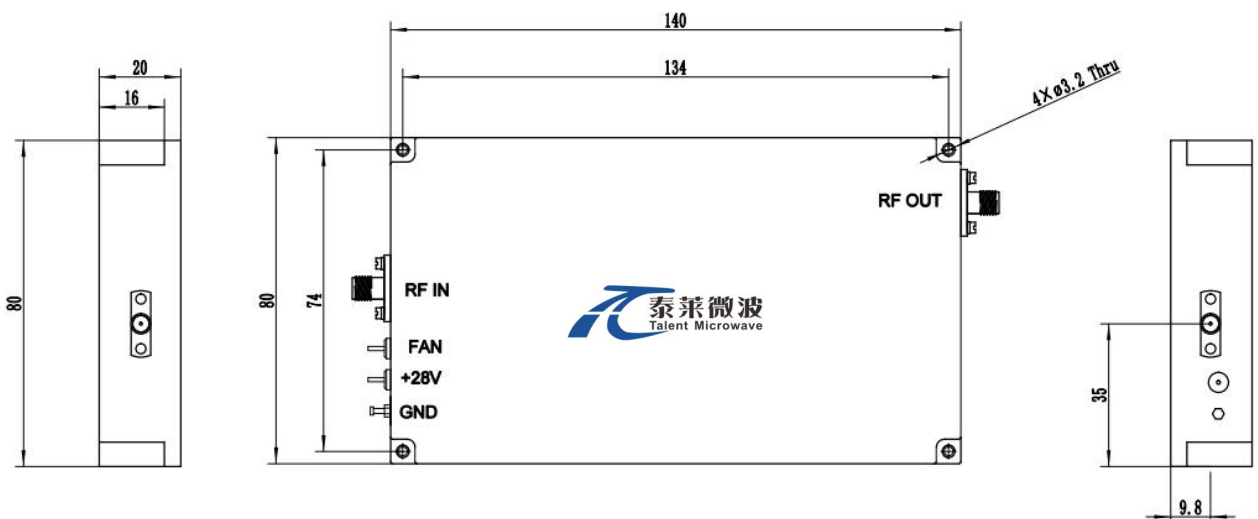
### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



### Outline Drawing:

Unit:mm



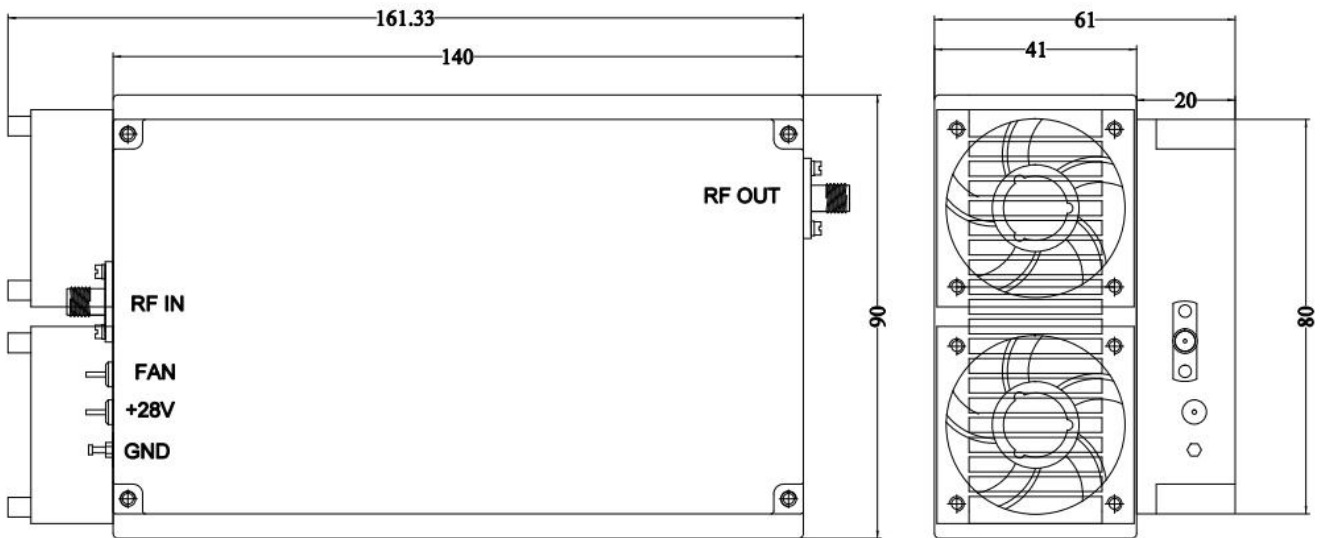
**\*\*\*Heat Sink Required During Operation**



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

**Outline Drawing:**

Unit:mm



**Environmental Conditions:**

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	°C
Non-operating Temperature*	-50		+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
TLPA2.39G2.41G-43-43	Power amplifier 2.39-2.41GHz, Gain:43dB,Psat:43dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA2.39G2.41G-43-43-HS	Power amplifier 2.39-2.41GHz, Gain:43dB,Psat:43dBm,+28V DC,With Heatsink	Rev.1.1