

## Power Amplifier

17-40GHz/35dB Gain/30dBm Psat

Model: TLPA17G40G-35-29

TLPA17G40G-35-29 is a power amplifier with a typical small signal gain of 35 dB and a nominal Psat of 30 dBm across the frequency range of 17 to 40 GHz. The DC power requirement for the amplifier is +12 VDC/700 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

### Features:

- Frequency range: 17-40GHz
- Gain: 35dB Typ
- Output Power Psat: 30dBm Typ
- 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	17		40	GHz
Small Signal Gain	33	35	38	dB
Output P1dB	27.5	29		dBm
Output Psat	28.5	30		dBm
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage		12		V DC
DC Supply Current		700		mA
Impedance		50		Ohms

### Mechanical Specifications:

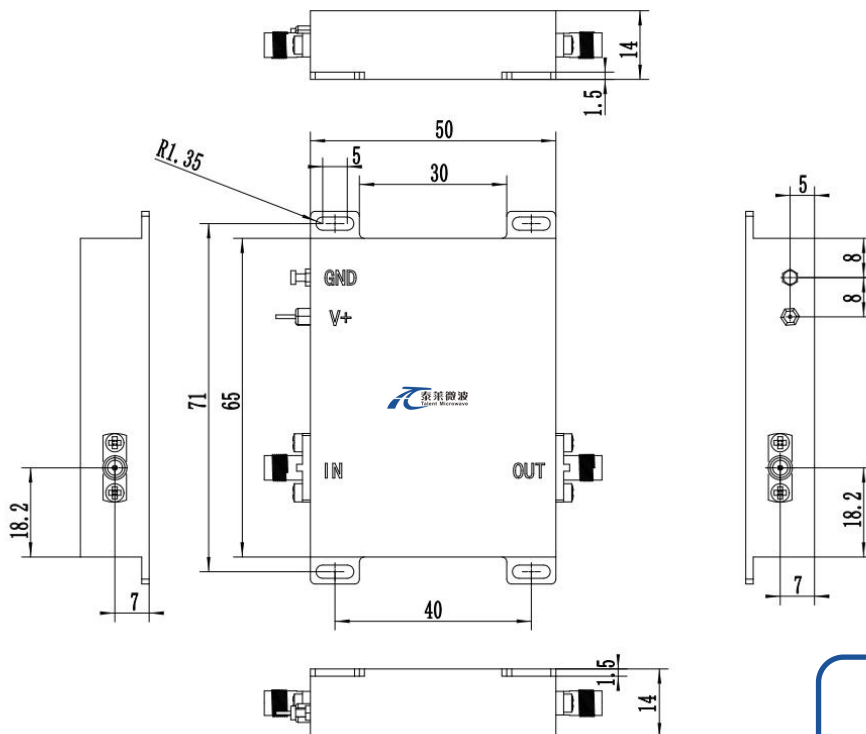
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	50*65*14(Without heatsink) 50*111*64(With heatsink)	mm

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+8 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

### Outline Drawing:

Unit:mm; Tolerance:±0.1mm

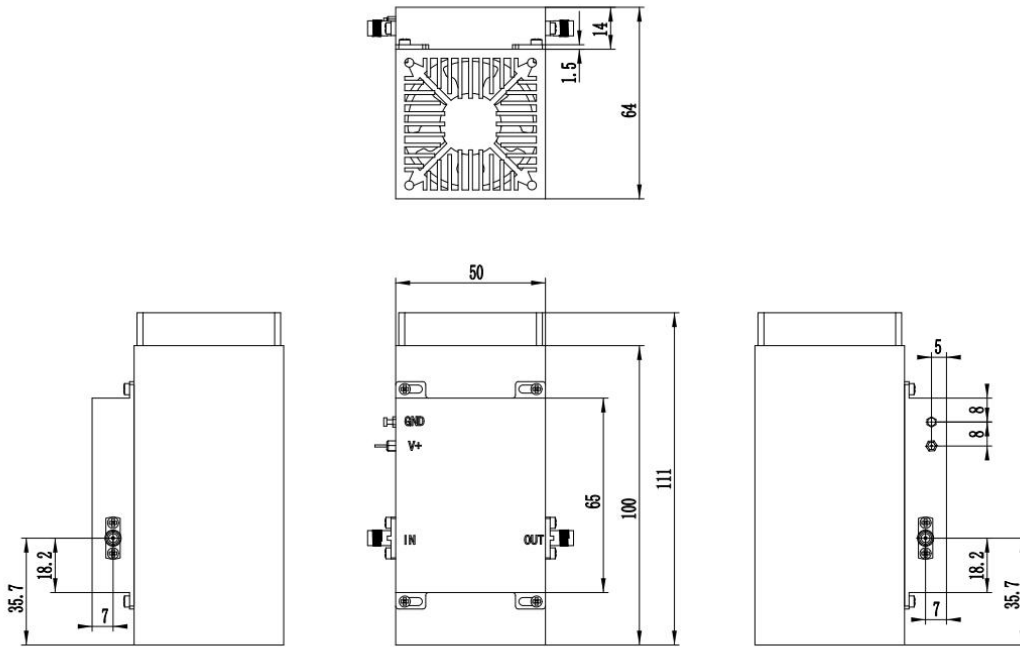


ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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

**Outline Drawing:**

Unit:mm



**Environmental Conditions:**

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°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
TLPA17G40G-35-29	Power amplifier 17-40GHz, Gain:35dB,Psat:30dBm,+12V DC,Without Heatsink	Rev.1.0
TLPA17G40G-35-29-HS	Power amplifier 17-40GHz, Gain:35dB,Psat:30dBm,+12V DC,With Heatsink	Rev.1.0