

## Power Amplifier

37-42GHz/36dB Gain/24dBm Psat

Model: TLPA37G42G-35-23

TLPA37G42G-35-23 is a power amplifier with a typical gain of 36 dB and a nominal Psat of 24 dBm across the frequency range of 37 to 42 GHz. The DC power requirement for the amplifier is +12 VDC/1 A. The input and output port configuration offers coax adapter structure with 2.4mm female.

### Features:

- Frequency range: 37-42GHz
- Gain: 36dB Typ
- Output Power Psat: 24dBm 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	37		42	GHz
Gain		36		dB
Gain Flatness			±2	dB
Output P1dB		23		dBm
Output Psat		24		dBm
Input VSWR		1.8	2.5	:1
Output VSWR		1.8	2.5	:1
DC Voltage		+12		V DC
DC Supply Current		1		A
Impedance		50		Ohms

## Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	60*50*12	mm

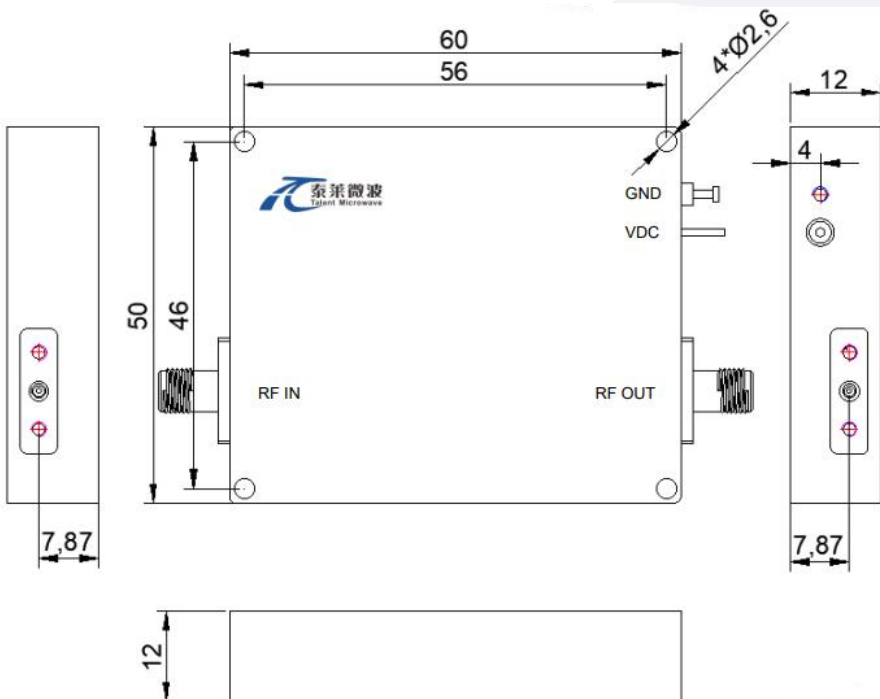
## Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
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.

### Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°C
Relative humidity	95			%
Altitude	10,000		50,000	feet
Shock / Vibration(MIL-STD-810F)	Airborne			
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
TLPA37G42G-35-23	Power amplifier 37-42GHz, Gain:36dB,Psat:24dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA37G42G-35-23-HS	Power amplifier 37-42GHz, Gain:36dB,Psat:24dBm,+12V DC,With Heatsink	Rev.1.1