

Power Amplifier

18-40GHz/32dB Gain/29dBm Psat

Model: TLPA18G40G-32-29

TLPA18G40G-32-29 is a power amplifier with a typical small signal gain of 32 dB and a nominal Psat of 29 dBm across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +12 VDC/2.2 A. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 18-40GHz
- Gain: 32dB Typ
- Output Power Psat: 29dBm 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	18		40	GHz
Small Signal Gain	30	32		dB
Gain Flatness		±2.5		dB
Output P1dB	27	28		dBm
OutputPsat		29		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+12		V DC
DC Supply Current		2.2		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	60*50*12	mm

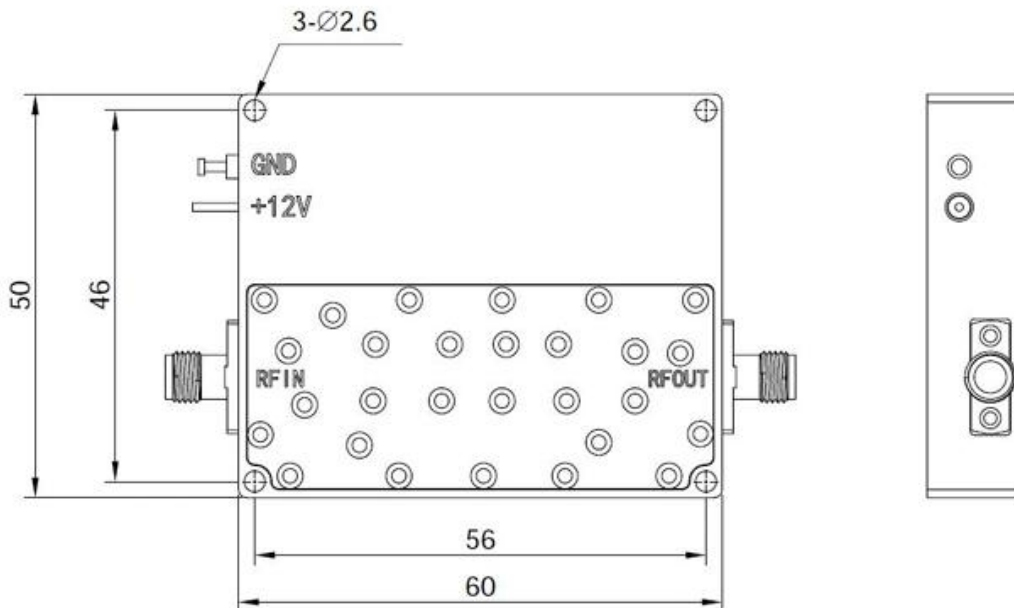
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	0 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.

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
TLPA18G40G-32-29	Power amplifier 18-40GHz, Gain:32dB,Psat:29dBm,+12V DC,Without Heatsink	Rev.1.2
TLPA18G40G-32-29-HS	Power amplifier 18-40GHz, Gain:32dB,Psat:29dBm,+12V DC,With Heatsink	Rev.1.2