

Power Amplifier

18-40GHz /19dB Gain/23 dBm Psat

Model: TLPA18G40G-19-23-LC

TLPA18G40G-19-23-LC is a power amplifier with a typical small signal gain of 19 dB and Psat of 23 dBm across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +12 VDC/125 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Ultra Wide Band: 18-40GHz
- Small Signal Gain:19 dB Typ
- Output Power Psat: 23 dBm 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		19		dB
Gain Flatness		±1.5		dB
Noise Figure		8		dB
Output P-1 dB		21		dBm
Output Psat		23		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+12	+15	V DC
DC Supply Current		125		mA
Impedance	50			Ohms

Mechanical Specifications:

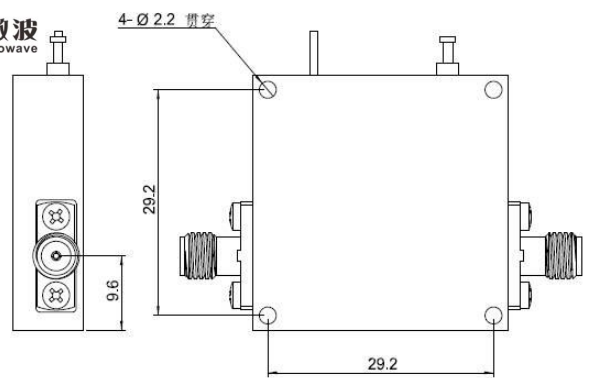
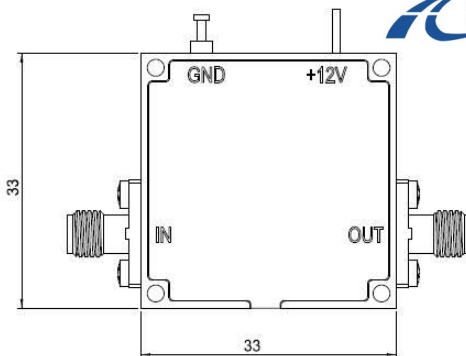
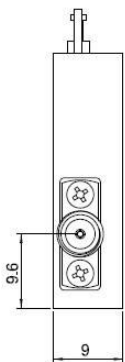
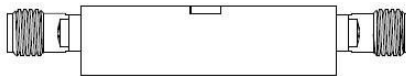
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	33×33×9	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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

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-19-23-LC	Power amplifier 18-40GHz,Power Gain:19dB,Psat:23dBm, +12V DC,With Heatsink	Rev.1.1