

Power Amplifier

8-12GHz /29dB Gain/27 dBm Psat

Model: TLPA8G12G-29-27-LC

TLPA8G12G-29-27-LC is a power amplifier with a typical small signal gain of 29 dB and Psat of 27 dBm across the frequency range of 8 to 12 GHz. The DC power requirement for the amplifier is +12 VDC/230mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Ultra Wide Band: 8-12GHz
- Small Signal Gain:29 dB Typ
- Output Power Psat: 27 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	8-12			GHz
Small Signal Gain		29		dB
Gain Flatness		±2.0		dB
Output P-1 dB		26.5		dBm
Output Psat		27		dBm
Power Added Efficiency@Psat		32		%
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+12	+15	V DC
DC Supply Current		230		mA
Impedance	50			Ohms

Mechanical Specifications:

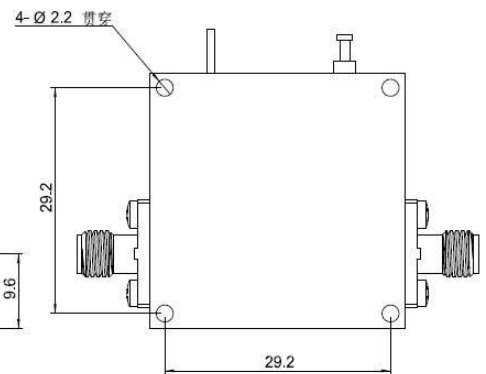
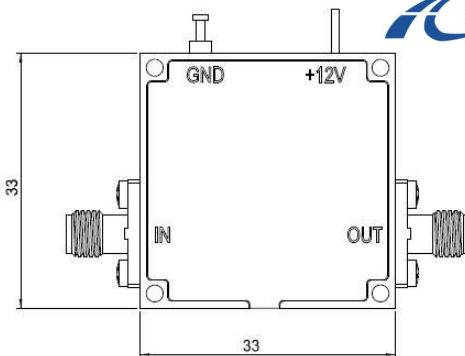
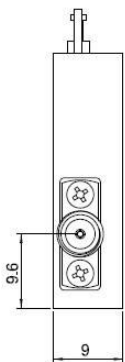
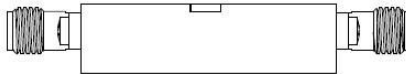
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	/	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+18 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
TLPA8G12G-29-27-LC	Power amplifier 8-12GHz,Power Gain:29dB,Psat:27dBm, +12V DC,With Heatsink	Rev.1.1