

Low Noise Amplifier

1-40GHz/6.0dB NF/30dB Gain/22dBm P1dB

Model: TLLA1G40G-30-60

TLLA1G40G-30-60 is a low noise amplifier with a typical small signal gain of 30 dB and a nominal noise figure of 6.0 dB across the frequency range of 1 to 40 GHz. The DC power requirement for the amplifier is +9 V DC/360 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 1-40GHz
- Gain: 30dB Typ
- Noise Figure: 6.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1		40	GHz
Small Signal Gain	29	30		dB
Noise Figure		6		dB
Output P1dB		22		dBm
Output Psat		23		dBm
Input VSWR		1.6		:1
Output VSWR		1.8		:1
DC Voltage		+9	+12	V DC
DC Supply Current		360		mA
Impedance		50		Ohms

Mechanical Specifications:

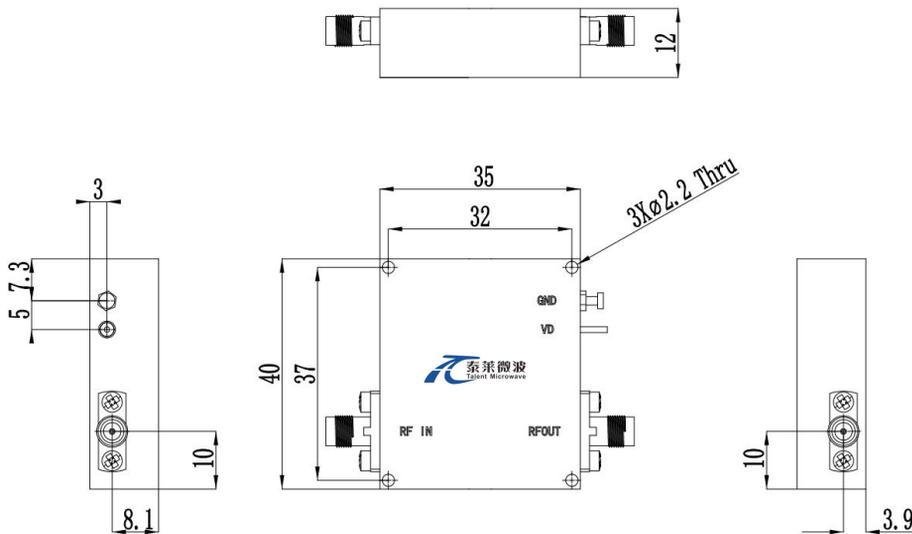
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	35*40*12	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12V
RF Input Power	0 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	-45		+85	°C
Non-operating Temperature	-55		+125	°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			

Ordering Information:

Base Number	Description	Revision
TLLA1G40G-30-60	Low Noise Amplifier, 1-40GHz, Noise Figure:6.0dB, Gain: 30dB,P1dB:22dBm,+9V DC,Without Heatsink	Rev.1.2
TLLA1G40G-30-60-HS	Low Noise Amplifier, 1-40GHz, Noise Figure:6.0dB, Gain: 30dB,P1dB:22dBm,+9V DC,Without Heatsink	Rev.1.2