

Low Noise Amplifier

6-18GHz /1.5dB NF/23dB Gain/13 dBm P1dB

Model: TLLA6G18G-21-15-LC

TLLA6G18G-21-15-LC is a low noise amplifier with small signal gain of 23 dB and noise figure of 1.5 dB across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +12 V DC/20 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Ultra Wide Band:6-18GHz
- Gain: 23dB Typ
- Noise Figure: 1.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	6		18	GHz
Gain		23		dB
Gain Flatness		±1.5		dB
Noise Figure		1.5		dB
Output P-1 dB		13		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+12	+15	V DC
DC Supply Current		20		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	25×25×9	mm
Weight	/	g

Parameter	Value
Supply Bias Voltage	+7 V
RF Input Power	+18 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Unit:mm



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
TLLA6G18G-21-15-LC	Low Noise Amplifier, 6-18GHz, Noise Figure:1.5dB, Gain:23 dB,P1dB:13dBm,+12V DC,Without Heatsink	Rev.1.0