

Low Noise Amplifier

22.55-23.55GHz /1.8dB NF/45dB Gain

Model: TLLA22.55G23.55G-45-18-WR34

TLLA22.55G23.55G-45-18-WR34 is a K-Band low noise amplifier with a minimum small signal gain of 45 dB and a maximum noise figure of 1.8 dB across the frequency range of 22.55 to 23.55 GHz. The DC power requirement for the amplifier is +15 VDC. The input configuration offers an inline structure with WR-34 waveguides and UBR 260 TYPE anti-cocking flanges and output port is a female 2.92mm connector.

Features:

- Frequency range:22.55-23.55GHz
- Gain: 45dB Min
- Noise Figure: 1.8dB Min
- Unconditional stability

Applications:

- 5G & 6G
- Test & Measurement
- Mobile & Satellite Communications
- Radar Systems
- Weather & Earth Observation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	22.55		23.55	GHz
Small Signal Gain	45			dB
Noise Figure			1.8	dB
Output P1dB		10		dBm
Input VSWR			1.35	:1
Output VSWR			1.35	:1
DC Voltage		+15V		V DC

Mechanical Specifications:

Parameter	Value	Units
Input Connector	WR-34/ UBR 260 TYPE	
Output Connector	2.92mm Female	
Power Supply Pin	Solder Pin	
Size	TBD	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+18 V
RF Input Power	+12 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°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
TLLA22.55G23.55G-45-18-WR34	Low Noise Amplifier,22.55-23.55GHz, Noise Figure:1.8dB, Gain:45dB,+15V DC,WR-34	Rev.1.0