



Low Noise Amplifier

Model: LNA22.55G23.55G-4518-WR34

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

Ultrabroad frequency range, high small signal gain, low noise figure and good gain flatness

Features:

- Frequency range: 22.55-23.55GHz
- Small Signal Gain: 45dB min.
- Output P1dB: 10dBm typ.
- Noise Figure: 1.8dB max.
- Operating voltage/current: +15 VDC.
- Simple 220V system available SAC option.
- 50 Ohm Matched Input / Output.

Applications:

- Laboratory Applications
- R&D Labs
- Radar Systems
- ISM
- Test Instrumentation

Product Overview:

The LNA22.55G23.55G-4518-WR34 is a coaxial low noise operating in the 22.55 to 23.55 GHz frequency range. The amplifier offers a maximum noise figure of 1.8 dB, 10 dBm typical of output P1dB and a minimum small signal gain of 45 dB. The DC power requirement for the amplifier is +15 VDC. The input port configuration offers coax adapter structure with WR-34 or UBR 260 TYPE and output port configuration offers coax adapter structure with 2.92mm female.



Electrical Specifications at 25°C:

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		+15		V DC
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature	-10°C to +65°C	
Non-operating Temperature	-45°C to +85°C	
Relative humidity	95	%
RF Input Connector	WR-34/UBR 260 TYPE	
RF Output Connector	2.92mm Female	
DC Bias	Solder Pin	
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	
Dimensions W x H x D	TBD	mm

Absolute Maximum Ratings:

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



Ordering Information:

Base Number	Description	Optional
LNA22.55G23.55G-4518-WR34	Low Noise Amplifier, 22.55-23.55GHz, Gain:45dB,Noise Figure:1.8dB,P1dB:10dBm,+15V DC	Without Heatsink
LNA22.55G23.55G-4518-WR34-HS	Low Noise Amplifier, 22.55-23.55GHz, Gain:45dB,Noise Figure:1.8dB,P1dB:10dBm,+15V DC	With Heatsink