**CLN-1G2G-4505-S** is a Low Noise Amplifier providing a gain of 45 dB with a noise figure of 0.5 dB. The compact size and modularity makes it ideal for a wide range of applications.

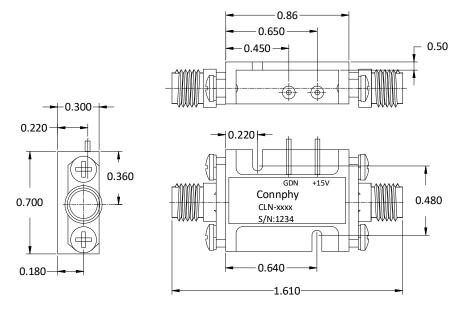
### Features:

- Frequency Range: 1.0-2.0 GHz
- Gain: 45 dB min.
- Noise Figure: 0.5 dB max.
- Solder filtered pins for DC connection
- Low VSWR, unconditional stable

## **Specifications:**

Frequency: 1.0-2.0 GHz Gain: 45 dB Min Gain Flatness: ±1.0 dB Max Noise Figure: 0.5 dB Max Output P1dB: 13 dBm Min **VSWR** Input: 2.0:1 Max **VSWR Output:** 2.0:1 Max DC Voltage: +15 V Typ DC Supply Current: 205 mA Typ RF Connector: **SMA Female** RF Input Power: 15 dBm Max

# **Mechanical Outline(Inches):**



# **Environmental Ratings:**

Temperature: -40°C to +75 °C Operating

-55 °C to +125 °C Non-Operating

Vibration: MIL-STD-202F, Method 204D Cond. B
Altitude: MIL-STD-202F, Method 105C Cond. B
Temperature Cycle: MIL-STD-202F, Method 107D Cond. A

Low Noise Amplifier					
CLN-1G2G-4505-S					
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	CONNPHY Microwave Inc.		
CHECKRD:	DATE: 14/05/15	SHEET: 1 OF 2	www.connphy.com sales@connphy.com		
ISSUED:	SIZE: A	SCALE : N / A	Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.		

#### **Typical Performance Data: S11** Gain S21 55 0 Return Loss (dB) Gain S21 (dB) -10 -30 40 35 -40 30 -50 1.2 2 1 1.2 1.4 1.6 1.8 2 1 1.4 1.6 1.8 Frequency (GHz) Frequency (GHz) **S22 Noise Figure Output P1dB** 0 Return Loss (dB) -10 2.5 25 Noise Figure (dB) -20 2 P1dB (dBm) 20 1.5 15 -30 -40 10 0.5 -50 5 0 0 1.2 1.6 1.8 2 1 1.4 1.2 1.8 1.4 1.6 2 2 1 1.2 1.4 1.6 1.8 Frequency (GHz) Frequency (GHz) Frequency (GHz)

Note: Test data taken with case temperature of +23 °C

# **Environmental Ratings:**

Temperature: -40°C to +75 °C Operating

-55 °C to +125 °C Non-Operating

Vibration: MIL-STD-202F, Method 204D Cond. B
Altitude: MIL-STD-202F, Method 105C Cond. B
Temperature Cycle: MIL-STD-202F, Method 107D Cond. A

Low Noise Amplifier CLN-1G2G-4505-S				
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	CONNPHY Microwave Inc. www.connphy.com sales@connphy.com	
CHECKRD:	DATE: 14/05/15	SHEET : 2 OF2		
ISSUED:	SIZE: A	SCALE : N / A	Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.	