**CHP-1G6G-5046-S** is a solid-state design utilising GaN power transistor technology. The amplifier will support continuous, modulated or pulsed input signals, and is designed to operate in 100% duty cycles. Protection circuits are incorporated to ensure long-term reliability.

#### Features:

Solid State Linear GaN design Over temperature protection Reverse polarity protection

Control line for remote operation

## **Electrical Specifications:**

Frequency: 1.0-6.0 GHz

Power Gain: 50 dB Min

Gain Flatness: ±2.0 dB Typ

Power Output: +46 dBm Typ, 45 dBm Min

Harmonics: -15 dBc Typ
Non Harmonics Spurious: -70 dBc Min
Input Power: +15 dBm Max
Input Return Loss: 10 dB Min
Output Return Loss: 10 dB Min

DC Supply Current: 7 A Typ, 8.5 A Max

Switching Time: 2uS Max

DC Voltage:

Over Temp Protection: OFF @ 70C case temp, Autoreset @ 60C

28 V Typ

## **Mechanical Specifications:**

Parameter	Specification
Dimensions WxHxD	8.66 × 3.96 ×1.10Inches
RF Connectors In/Out	SMA-F
DC Connector	9 Pin D-Sub
Cooling	External Heatsink

## **DC Connector PIN Assignment:**

Pin	Description	Specification
1	Status Monitor	TTL "high" = RF O/P >5w nom
2	Current Monitor	50mA/100mV nom
3	Temp Monitor	10mV/C +500mV @ 50C
4	NC	NC
5	Remote Control	TTL Low=Enable; High=Disable
6,7	+V	+28V +/-2V
8,9	GND	GND

#### **Environmental Ratings:**

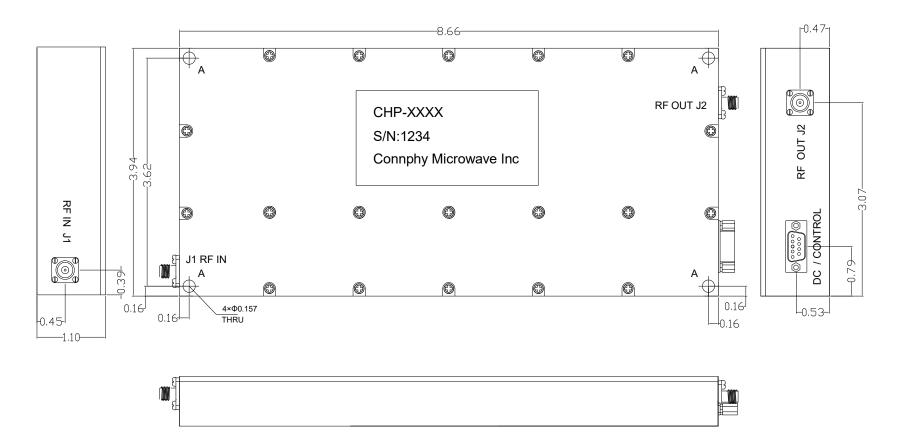
Temperature: -10°C to +70 °C Operating

-40 °C to +90 °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

SOLID STATE HIGH POWER AMPLIFIER CHP-1G6G-5046-S					
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.		

# **Mechanical Outline (Inches):**



# **Environmental Ratings:**

Temperature: -10°C to +70 °C Operating

-40 ºC to +90 ºC 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

SOLID STATE HIGH POWER AMPLIFIER CHP-1G6G-5046-S					
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	CONNPHY Microwave Inc.		
CHECKRD:	DATE: 14/05/15	SHEET : 2 OF 2	www.connphy.com sales@connphy.com		
ISSUED:	SIZE: A	SCALE : N / A	Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.		