**CHP-250K1G-4040-S** is a complete solid state microwave power amplifier module that features high efficiency, high output power and wide dynamic range. It is based on advanced microwave device technology and provides long-term reliability and high ruggedness.

#### Features:

250 kHz-1 GHz ultra-broadband

Psat: 10W Min

Suitable for all modulations standardss

Built-in protection circuits
Class AB linear LDMOS design

#### **Electrical Specifications:**

Frequency: 0.25-1000 MHz

Power Gain: 40 dB Min
Gain Flatness: ±2 dB Max
Power Output: +40 dBm Min
Harmonics: -20 dBc Typ
Non Harmonics Spurious: -60 dBc Typ

Input Power: +10 dBm Max
Input Return Loss: 10 dB Min
Output Return Loss: 10 dB Min
DC Voltage: +28 to +30 V

DC Supply Current: 2 A Typ

# **Mechanical Specifications:**

Parameter	Specification
Dimensions WxHxD	4.921 X 2.480 X 1.063 Inches
RF Connectors In/Out	SMA-F
DC Connector	9-Pin D-Sub
Cooling	External Heatsink

### **DC Connector PIN Assignment:**

Pin	Description	Specification
1	NC	NC
2	Gain Control	Option-103 - Analog Gain Contro
3	CURRENT SENSOF	50mV/100mA Typ
4	TEMP SENSOR	10mV/C +500mV Typ
5	Remote Control	TTL
6,7	+28	+28V
8,9	GND	GND

### **Environmental Ratings:**

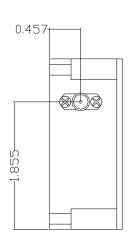
Temperature: -20°C to +75 °C Operating

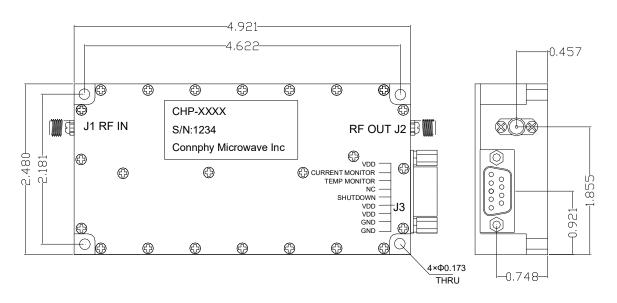
-40 ºC to +85 ºC Non-Operating

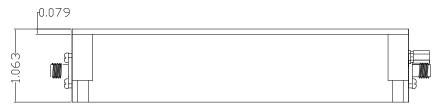
Vibration: MIL-STD-202F, Method 204D Cond. B
Altitude: MIL-STD-202F, Method 105C Cond. B
Temperature Cycle: MIL-STD-202F, Method 107D Cond. A

SOLID STATE HIGH POWER AMPLIFIER CHP-250K1G-4040-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.	

# **Mechanical Outline (Inches):**







#### **Environmental**

Temperature: -20°C to +75 °C Operating

-40 °C to +85 °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-250K1G-4040-S DRAWN: DWG NO.: **REV CODE:** Rev.1.0 CHECKRD: DATE: SHEET: www.connphy.com 14/05/15 2 OF 2 sales@connphy.com ISSUED: SIZE: SCALE: Notes: SPEC ARE SUBJECT TO N/A CHANGE WITHOUT NOTICE.