

**MODEL 5800842-001**  
**2.0-6.0 GHz**  
**5 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High  
 Power RF Amplifier**

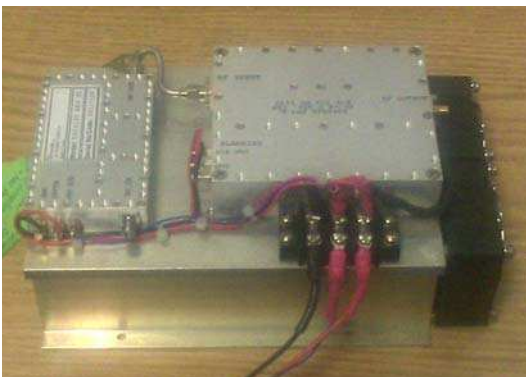
The 5800842-001 is a 5 Watt broadband amplifier that covers the 2.0-6.0 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3<sup>rd</sup> order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5800842-001 comes with an extended multiyear warranty.

	<u>Parameter</u>	<u>Specification @ 25°C</u>
<b><u>Electrical</u></b>		
1	Frequency Range	2.0-6.0 GHz
2	Saturated Output Power	5 Watts Typ.
3	Power at P1dB Compression	2.5 Watts Min
3	Small Signal Gain	+40 dB min
4	Small Gain Flatness	± 2.5 dB max
5	IP <sub>3</sub>	+46 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical @ 5 Watts
8	Spurious Signals	< -60 dBc typical @ 5 Watts
9	Input/Output Impedance	50 Ohms nominal
10	DC Input Current	3 Amps max
11	DC Input	24 –30 VDC*
12	RF Input	+3 dBm max
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	A/AB
15	On/Off	On = Open 3-5 Vdc Off = <0.5 Vdc
<b><u>Mechanical</u></b>		
16	Dimensions (W Heatsink and Fans)	L 9" x W 5.2" x H 4.25"
17	Weight (W Heatsink and Fans)	8 lb. max
18	Connectors	RF IN/Out: SMA female DC terminals: Voltage in
19	Grounding	Chassis
20	Cooling	Adequate Heatsink Required
<b><u>Environmental</u></b>		
21	Baseplate Temperature	0° C to +50° C
22	Operating Humidity	95% Non-condensing
23	Operating Altitude	Up to 10,000' Above Sea Level
24	Shock and Vibration	Normal Truck Transport

Specifications subject to change without notice

\*= Higher Voltages translates to an increase in Power out



**FEATURES:**

- Heatsink and Fans Included
- Enable/Disable Pin

**Pin Layout:**

- Pin 1: GND
- Pin 2: Shutdown
- Pin 3: Voltage in