

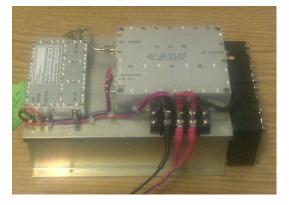
5300 Beethoven Street, Los Angeles, CA 90066 TEL: (310)306-5556 • FAX: (310)821-7413 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

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 3rd 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_{RF} amplifiers, the 5800842-001 comes with an extended multiyear warranty.

Specifications subject to change without notice



Parameter Specification @ 25° C Electrical 1 Frequency Range 2.0-6.0 GHz 2 Saturated Output Power 5 Watts Typ. 3 Power at P1dB Compression 2.5 Watts Min +40 dB min 3 Small Signal Gain 4 Small Gain Flatness + 2.5 dB max 5 IP₃ +46 dBm typical 6 Input VSWR 2:1 max 7 -20 dBc typical @ 5 Watts Harmonics 8 **Spurious Signals** < -60 dBc typical @ 5 Watts 9 Input/Output Impedance 50 Ohms nominal 10 **DC Input Current** 3 Amps max 24 - 30 VDC* 11 DC Input **RF** Input 12 +3 dBm max **RF Input Signal Format** CW/AM/FM/PM/Pulse 13 14 **Class of Operation** A/AB On = Open 3-5 Vdc 15 Blanking Off = <0.5 Vdc Mechanical Dimensions L 9" x W 5.2" x H 4.25" 16 (W Heatsink and Fans) 17 Weight (W Heatsink and 4.20 Lbs. Fans) 18 Connectors RF IN/Out: SMA female DC terminals: Voltage in Grounding 19 Chassis 20 Cooling Adequate Heatsink Required Environmental 0° C to +50° C 21 **Baseplate Temperature** 22 **Operating Humidity** 95% Non-condensing 23 **Operating Altitude** Up to 10,000' Above Sea Level 24 Shock and Vibration Normal Truck Transport

*= 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

MODEL 5800842-001

2.0-6.0 GHz 5 WATTS LINEAR POWER RF AMPLIFIER