

5300 Beethoven Street, Los Angeles, CA 90066 TEL: (310)306-5556 • FAX: (310)577-9887 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 5300688-001

2.0-4.0 GHz 20 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5300688 is a 20 Watt broadband amplifier that covers the 2.0-4.0GHz 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 5300688-001 comes with an extended multiyear warranty.

Specifications subject to change without notice

| | | <u>Parameter</u> | Specification @ 25° C |
|----|----------------------|--------------------------|-------------------------------------|
| | <u>Electrical</u> | | |
| | 1 | Frequency Range | 2.0-4.0 GHz |
| | 2 | Saturated Output Power | 20 Watts typical |
| | 3 | Power Output @ 1dB Comp. | 15 Watts min |
| ı | 4 | Small Signal Gain | +43 dB min |
| | 5 | Gain Flatness | <u>+</u> 2 dB max |
| | 6 | IP ₃ | +48 dBm typical |
| | 7 | Input VSWR | 2:1 max |
| | 8 | Harmonics | -20 dBc minimum |
| | 9 | Spurious Signals | < -60 dBc minimum |
| | 10 | Input/Output Impedance | 50 Ohms nominal |
| | 11 | DC Input Current | 15 Amps max |
| | 12 | DC Input | 13 VDC nominal |
| | 13 | RF Input | +0 dBm nominal for full rated power |
| | 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse |
| | 15 | Class of Operation | A/AB |
| | <u>Mechanical</u> | | |
| | 16 | Dimensions | 12" x 10" x 1.75" (Includes Driver) |
| | 17 | Weight | 8 lb. max |
| | 18 | Connectors | SMA female |
| | 19 | Grounding | Chassis |
| | 20 | Cooling | Adequate Heatsink Required |
| | Environmental | | |
| | 21 | Baseplate Temperature | 0° C to +50C |
| e. | . 22 | Operating Humidity | 95% Non-condensing |
| | 23 | Operating Altitude | Up to 10,000' Above Sea Level |
| | 24 | Shock and Vibration | Normal Truck Transport |
| | | 12.070 | |

Application Notes

- ♦ Unit Includes driver model 5303075, for full rated output power with 0 dBm nominal input from signal source
- ♦ Adequate Heatsink Required:
 Recommend Ophir RF Model HTS0000
- Recommend Ophir RF Model HTS00008
- ♦ Adequate Airflow required consult factory for fans
- ♦ Heatsink and Fans can be incorporated to this module from Ophir RF. Change part number to 5800688-001. Consult factory for incorporating drivers to the Heatsink/Fan Assembly

