

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

MODEL 5083

200 - 500 MHz **200 WATTS** LINEAR POWER RF AMPLIFIER

Solid State **Broadband High Power RF Amplifier**

The 5083 is a 200 Watt broadband amplifier that covers the 200 - 500 MHz 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 comthis amplifier ponents, achieves high efficiency operation with proven reliability. Like all OPHIR_{RF} amplifiers, the 5083 comes with an extended multiyear warranty.

| | <u>Parameter</u> | Specification @ 25° C |
|----------------------|----------------------------|--|
| Electrical | | |
| 1 | Frequency Range | 200 – 500 MHz |
| 2 | Saturated Output Power | 200 Watts typical |
| 3 | Power Output @ 1dB Comp. | 125 Watts min |
| 4 | Small Signal Gain | +54 dB min |
| 5 | Small Signal Gain Flatness | <u>+</u> 1.5 dB max |
| 6 | IP ₃ | +57 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -20 dBc typical @ 125 Watts |
| 9 | Spurious Signals | > -60 dBc typical @ 125 Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | AC Input Power | 800 Watts max |
| 12 | AC Input | 100 – 240 VAC, single phase |
| 13 | RF Input | 0 dBm max |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse |
| 15 | Class of Operation | AB |
| <u>Mechanical</u> | | |
| 16 | Dimensions | 19" x 5.25" x 20" |
| 17 | Weight | 45 lb. max |
| 18 | Connectors | Type-N |
| 19 | Grounding | Chassis |
| 20 | Cooling | Internal Forced Air |
| <u>Environmental</u> | | |
| 21 | Operating 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. |

CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current
- ♦ Over Voltage

ORDERING MODELS

- ♦ R - Rear Panel Connectors
- ◊ F - Front Panel Connectors
- ♦ RE R model w/Control Option
- ♦ FE F model w/Control Option
- ♦ RT RE model w/Ethernet Interface
- ♦ FT FE model w/Ethernet Interface Approved By:



F Model Shown