



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 5804043**  
**2.5 - 6.0 GHz**  
**50 WATTS**  
**LINEAR POWER RF AMPLIFIER**

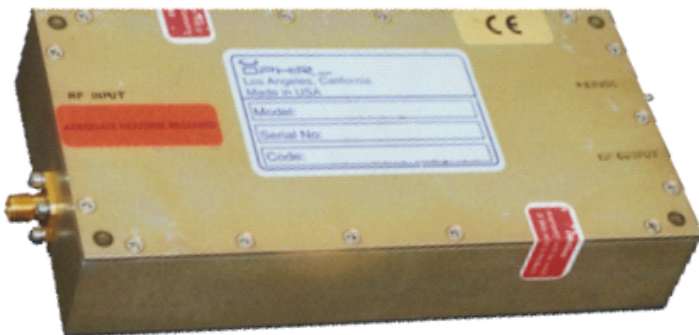
**Solid State  
 Broadband High  
 Power RF Amplifier**

The 5804043 is a 50 Watt broadband amplifier that covers the 2.5 - 6.0 GHz frequency range. This small and lightweight amplifier utilizes Class A 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 5804043 comes with an extended multiyear warranty.

|                             | <u>Parameter</u>       | <u>Specification @ 25° C</u>                      |
|-----------------------------|------------------------|---|
| <b><u>Electrical</u></b>    |                        |   |
| 1                           | Frequency Range        | 2.5 - 6.0 GHz                                     |
| 2                           | Saturated Output Power | 50 Watts min                                      |
| 3                           | Small Signal Gain      | +50 dB min  |
| 4                           | Gain Flatness          | ± 3.0 dB max                                      |
| 5                           | IP <sub>3</sub>        | 50dBm typical                                     |
| 6                           | Input VSWR             | 2:1 max   |
| 7                           | Harmonics              | -20 dBc typical                                   |
| 8                           | Spurious Signals       | < -60 dBc typical                                 |
| 9                           | Noise Figure           | < 10 dB   |
| 10                          | Input/Output Impedance | 50 Ohms nominal                                   |
| 11                          | DC Input Current       | 12 Amps max                                       |
| 12                          | DC Input               | 24 VDC nominal                                    |
| 13                          | RF Input               | +13 dBm max<br>0 dBm nominal for full rated power |
| 14                          | RF Input Signal Format | CW/AM/FM/PM/Pulse                                 |
| 15                          | Class of Operation     | A/AB  |
| <b><u>Mechanical</u></b>    |                        |   |
| 16                          | Dimensions             | 10" x 10" x 4.2"                                  |
| 17                          | Weight                 | 12 Lbs.   |
| 18                          | Connectors             | SMA female  |
| 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 20,000' Above Sea Level                     |
| 24                          | Shock and Vibration    | MIL-STD-810F                                      |

Specifications subject to change without notice



**FEATURES:**  
 Heatsink and Fans Included (Not Shown)