



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 5303066-001

**2 - 500 MHz**  
**10 WATTS**

### Solid State Broadband High Power RF Amplifier

The 5303066-001 is a 10 Watt broadband amplifier that covers the 2 – 500 MHz 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 5303066-001 comes with an extended

|                             | Parameter                  | Specification @ 25° C         |
|-----------------------------|----------------------------|-------------------------------|
| <b><u>Electrical</u></b>    |                            |                               |
| 1                           | Frequency Range            | 2 – 500 MHz                   |
| 2                           | Saturated Output Power     | 10 Watts typical              |
| 3                           | Power Output @ 1dB Comp.   | 6 Watts min                   |
| 4                           | Small Signal Gain          | +40 dB min                    |
| 5                           | Gain Flatness              | ± 1.5 dB max                  |
| 6                           | IP <sub>3</sub>            | +44 dBm typical               |
| 7                           | Input VSWR                 | 2:1 max                       |
| 8                           | Harmonics                  | -20 dBc typical @ 6 Watts     |
| 9                           | Spurious Signals           | > -60 dBc typical @ 6 Watts   |
| 10                          | Input/Output Impedance     | 50 Ohms nominal               |
| 11                          | DC Input Current @ 6 Watts | 2.5 Amps max                  |
| 12                          | DC Input                   | 28 VDC nominal                |
| 13                          | RF Input                   | 0 dBm max                     |
| 14                          | RF Input Signal Format     | CW/AM/FM/PM/Pulse             |
| 15                          | Class of Operation         | AB                            |
| 16                          | Shutdown *                 | 30 dB typical gain reduction  |
| <b><u>Mechanical</u></b>    |                            |                               |
| 17                          | Dimensions                 | 6" x 3" x 1.1"                |
| 18                          | Weight                     | 2 lb. max                     |
| 19                          | Connectors                 | SMA female                    |
| 20                          | Grounding                  | Chassis                       |
| 21                          | Cooling                    | Adequate Heatsink Required    |
| <b><u>Environmental</u></b> |                            |                               |
| 22                          | Baseplate Temperature      | 0° C to +50° C                |
| 23                          | Operating Humidity         | 95% Non-condensing            |
| 24                          | Operating Altitude         | Up to 10,000' Above Sea Level |
| 25                          | Shock and Vibration        | Normal Truck Transport        |

Specifications subject to change without notice.



### **\* TTL CONTROL:**

TTL (Low) = RF Shutdown  
 TTL (High or Open) = RF Enable