



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 5800690
0.7 – 4.2 GHz
1.5 WATTS
LINEAR POWER RF AMPLIFIER

**Solid State
 Broadband High Power
 RF Amplifier**

The 5800690 is a 1.5 Watt broadband amplifier that covers the 0.7 – 4.2 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 5800690 comes with an extended multiyear warranty.

| | Parameter | Specification @ 25° C |
|----------------------|--------------------------|--|
| Electrical | | |
| 1 | Frequency Range | 0.7 – 4.2 GHz |
| 2 | Saturated Output Power | 1.5 Watts typical |
| 3 | Power Output @ 1dB Comp. | 1.2 Watts min |
| 4 | Small Signal Gain | +31 dB min |
| 5 | Gain Flatness | 0.7 – 1 GHz \pm 2.5 dB max 1 – 4.2 GHz \pm 2 dB max |
| 6 | IP ₃ | +41 dBm typical |
| 7 | Input VSWR | 2.2:1 max |
| 8 | Harmonics | -20 dBc typical @ 1.2 Watt |
| 9 | Spurious Signals | < -60 dBc typical @ 1.2 Watt |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | DC Input Current | 1.2 A max |
| 12 | DC Input | 13 VDC nominal |
| 13 | RF Input | +10 dBm max |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse |
| 15 | Class of Operation | A/AB |
| Mechanical | | |
| 16 | Dimensions (w/Heatsink) | 4.0" x 2.9" x 2.1" |
| 17 | Weight (w/Heatsink) | 1.5 lb. max |
| 18 | Connectors | SMA female |
| 19 | Grounding | Chassis |
| 20 | Cooling | Adequate Heatsink Required |
| Environmental | | |
| 21 | Baseplate 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.



FEATURES:

Heatsink and Fan Included (Not Shown)