

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 5803039D-007

50 - 1000 MHz 50 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5803039D-007 is a 50 Watt broadband amplifier that covers the 50 – 1000 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 components, this amplifier achieves high efficiency with operation proven reliability. Like all OPHIR_{RF} amplifiers, the 5803039D-007 comes with an extended multiyear warranty.

| | <u>Parameter</u> | Specification @ 25° C |
|-------------------|---|---|
| Electrical | | |
| 1 | Frequency Range | 50 – 1000 MHz |
| 2 | Saturated Output Power | 50 Watts typical |
| 3 | Power Output @ 1dB Comp. | 30 Watts min |
| 4 | Small Signal Gain | +25 dB min |
| 5 | Gain Flatness | <u>+</u> 2 dB max |
| 6 | IP ₃ | +51 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -20 dBc typical @ 30 Watts |
| 9 | Spurious Signals | < -60 dBc typical @ 30 Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | DC Input Current | 14 Amps max |
| 12 | DC Input | 28 VDC nominal |
| 13 | RF Input | +22 dBm |
| 14 | Blanking Noise | 10dB above KTB |
| 15 | Blanking Time OFF to ON Blanking Time ON to OFF | 10uS to 0.5dB below max power 1uS On to Off |
| <u>Mechanical</u> | | |
| 16 | Dimensions (w/Heatsink) | 17.5" x 9.8" x 4.1" |
| 17 | Weight (w/Heatsink) | 22 lbs. max |
| 18 | Connectors | SMA female |
| 19 | Grounding | Chassis |
| 20 | Cooling | Adequate Airflow Required |
| Environmental | | |
| 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 | NormalicTituckjeTransportut notice. |
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FEATURES:

Heatsink and Fans Included (Not Shown)