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**MODEL 5803039D-001**  
**20 - 1000 MHz**  
**70 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High  
 Power RF Amplifier**

The 5803039D-001 is a heatsink assembly which consists of the 5303039A and 5300836 module amplifiers.

This system provides 70 Watts across the 20 – 1000 MHz frequency range. This small and lightweight system 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 5803039D-001 comes with an extended warranty.

|                      | Parameter                  | Specifications @ 25° C        |
|----------------------|----------------------------|-------------------------------|
| <b>Electrical</b>    |                            |                               |
| 1                    | Frequency Range            | 20 – 1000 MHz                 |
| 2                    | Saturated Output Power     | 70 Watts typical              |
| 3                    | Power Output @ 1dB Comp.   | 30 Watts min                  |
| 4                    | Small Signal Gain          | +50 dB min                    |
| 5                    | Gain Flatness              | ± 2.0 dB max                  |
| 6                    | IP <sub>3</sub>            | +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           | 18 Amps max                   |
| 12                   | DC Inputs                  | 28 VDC nominal                |
| 13                   | RF Input                   | +0 dBm max                    |
| 14                   | RF Input Signal Format     | CW/AM/FM/PM/Pulse             |
| 15                   | Class of Operation         | AB                            |
| <b>Mechanical</b>    |                            |                               |
| 16                   | Dimensions (with Heatsink) | 17.5" x 9.8" x 4.1"           |
| 17                   | Weight (with Heatsink)     | 22 lbs. max                   |
| 18                   | RF Connectors              | SMA female                    |
| 19                   | Grounding                  | Chassis                       |
| 20                   | Cooling                    | Adequate Ventilation Required |
| <b>Environmental</b> |                            |                               |
| 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.



**FEATURES:**  
 Heatsink and fans included.