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## MODEL 5804025

**800-3000 MHz  
 200 WATTS  
 LINEAR POWER RF AMPLIFIER**

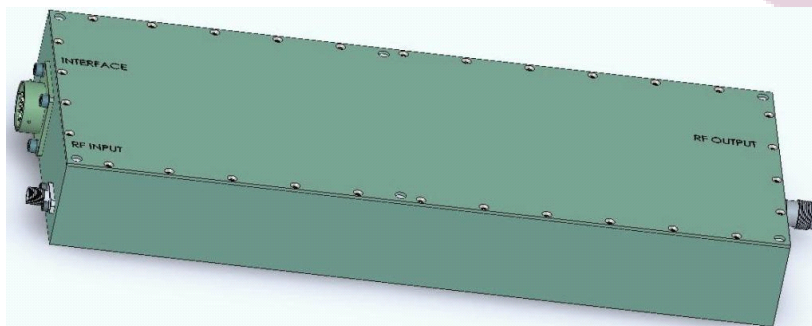
### Solid State Broadband High Power RF Amplifier

The 5804025 is a 200/150 Watt broadband amplifier that covers the 800-3000 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 5804025 comes with an extended multiyear warranty.

|                             | Parameter                           | Specification @ 25° C                                                                        |
|-----------------------------|-------------------------------------|----------------------------------------------------------------------------------------------|
| <b><u>Electrical</u></b>    |                                     |                                                                                              |
| 1                           | Frequency Range                     | 800-3000 MHz                                                                                 |
| 2                           | Output Power CW (P <sub>SAT</sub> ) | 0.8-2.5 GHz: 200 Watts typical<br>2.5-3.0 GHz: 150 Watts typical                             |
| 3                           | Small Signal Gain                   | +53 dB min                                                                                   |
| 4                           | Power Gain Flatness                 | 0.8 – 2.5 GHz: ± 1.5 dB max<br>2.5 – 3.0 GHz: ± 2.0 dB max                                   |
| 5                           | IP <sub>3</sub>                     | +54 dBm typical                                                                              |
| 6                           | Input VSWR                          | 2:1 max                                                                                      |
| 7                           | Harmonics                           | -15 dBc typical                                                                              |
| 8                           | Spurious Signals                    | < -60 dBc typical                                                                            |
| 9                           | Input/Output Impedance              | 50 Ohms nominal                                                                              |
| 10                          | DC Current for Rated Output         | 35 Amps maximum                                                                              |
| 11                          | DC Input                            | 28 VDC nominal                                                                               |
| 12                          | RF Input                            | +0 dBm max                                                                                   |
| 13                          | RF Input Signal Format              | CW/AM/FM/PM/Pulse                                                                            |
| 14                          | Class of Operation                  | A/AB                                                                                         |
| <b><u>Mechanical</u></b>    |                                     |                                                                                              |
| 17                          | Dimensions                          | 17.25" x 108" x 4.5"                                                                         |
| 18                          | Weight                              | 22 Lbs.                                                                                      |
| 19                          | Connectors                          | (RF Input) SMA female<br>(RF Output) TNC female<br>ITT, Cannon Series II<br># MS27499E12B35P |
| 20                          | Grounding                           | Chassis                                                                                      |
| 21                          | Cooling                             | Adequate airflow 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 40,000' Above Sea Level                                                                |
| 25                          | Shock and Vibration                 | MIL-STD-810F (Method 516.5)                                                                  |

Specifications subject to change without notice



### DC Blanking:

◇ Rise/Fall Time < 10µs

### Features/Options:

Heatsink and fans



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### Interface connector pin-out and description table:

| Connector and Pin Number: | Description:           |
|---------------------------|------------------------|
| J1-1                      | GND                    |
| J1-2                      | +28 Vdc                |
| J1-3                      | +28 Vdc                |
| J1-4                      | +28 Vdc                |
| J1-5                      | +28 Vdc                |
| J1-6                      | +28 Vdc                |
| J1-7                      | GND                    |
| J1-8                      | GND                    |
| J1-9                      | No connection          |
| J1-10                     | No connection          |
| J1-11                     | Enable/Disable (Input) |
| J1-12                     | No connection          |
| J1-13                     | Blanking (Input)       |
| J1-14                     | No connection          |
| J1-15                     | GND                    |
| J1-16                     | +28 Vdc                |
| J1-17                     | +28 Vdc                |
| J1-18                     | GND                    |
| J1-19                     | No connection          |
| J1-20                     | No connection          |
| J1-21                     | GND                    |
| J1-22                     | GND                    |

### Logic for Enable/Disable and Blanking pins:

3-5 Vdc = on; <0.5 Vdc = off