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Electrical

## **Solid State Broadband High Power RF Amplifier**

The 5150 is a 13 Watt broadband amplifier that covers the 0.8 - 2.5 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide 3<sup>rd</sup> order an excellent intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and amplifier components, this achieves high efficiency operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5150 comes extended multiyear with an warranty.

## **CIRCUIT PROTECTIONS**

◊ Thermal Overload ♦ Over Current ◊ Over Voltage

## **ORDERING MODELS**

- ◊ R - Rear Panel Connectors
- Front Panel Connectors ◊ F
- ♦ R
- ♦ F

| _  |                            |   |
|----|----------------------------|---|
| RE | - R model w/Control Option | - |
| ΞE | - F model w/Control Option |   |
|    |                            |   |
|    |                            |   |
|    |                            |   |

## LINEAR POWER RF AMPLIFIER Parameter Specification @ 25° C

**MODEL 5150** 

0.8 - 2.5 GHz

**13 WATTS** 

| 1                 | Frequency Range            | 0.8 – 2.5 GHz                 |  |
|-------------------|----------------------------|-------------------------------|--|
| 2                 | Saturated Output Power     | 13 Watts typical              |  |
| 3                 | Power Output @ 1dB Comp.   | 10 Watts min                  |  |
| 4                 | Small Signal Gain          | +42 dB min                    |  |
| 5                 | Small Signal Gain Flatness | <u>+</u> 2.0 dB max           |  |
| 6                 | IP <sub>3</sub>            | +50 dBm typical               |  |
| 7                 | Input VSWR                 | 2:1 max                       |  |
| 8                 | Harmonics                  | -20 dBc typical @ 10 Watts    |  |
| 9                 | Spurious Signals           | < -60 dBc typical @ 10 Watts  |  |
| 10                | Input/Output Impedance     | 50 Ohms nominal               |  |
| 11                | AC Input Power             | 200 Watts max                 |  |
| 12                | AC Input                   | 100 – 240 VAC, single phase   |  |
| 13                | RF Input                   | +10 dBm max                   |  |
| 14                | RF Input Signal Format     | CW/AM/FM/PM/Pulse             |  |
| 15                | Class of Operation         | A/AB                          |  |
| <b>Mechanical</b> |                            |                               |  |
| 16                | Dimensions                 | 19" x 5.25" x 20"             |  |
| 17                | Weight                     | 38 lb. max                    |  |
| 18                | Connectors                 | Type-N                        |  |
| 19                | Grounding                  | Chassis                       |  |
| 20                | Cooling                    | Internal Forced Air           |  |
| 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        | Normal Truck Transport        |  |
|                   |                            |                               |  |

Specifications subject to change without notice.



**FE Model Shown**