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## MODEL 5087-100

**10 kHz - 200 MHz**  
**100 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5087-100 is a 100 Watt broadband amplifier that covers the 10 kHz – 200 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 5087-100 comes with an extended multiyear warranty.

|                             | Parameter                  | Specification @ 25° C         |
|-----------------------------|----------------------------|-------------------------------|
| <b><u>Electrical</u></b>    |                            |                               |
| 1                           | Frequency Range            | 0.01 – 200 MHz                |
| 2                           | Saturated Output Power     | 100 Watts Min                 |
| 3                           | Power Output @ 1dB Comp.   | 95 Watts min                  |
| 4                           | Small Signal Gain          | +52 dB min                    |
| 5                           | Small Signal Gain Flatness | + 2.0 dB max                  |
| 6                           | IP <sub>3</sub>            | +60 dBm typical               |
| 7                           | Input VSWR                 | 2:1 max                       |
| 8                           | Harmonics                  | -15 dBc typical @ 100 Watts   |
| 9                           | Spurious Signals           | < -60 dBc typical @ 100 Watts |
| 10                          | Input/Output Impedance     | 50 Ohms nominal               |
| 11                          | AC Input Power             | 1200 Watts max                |
| 12                          | AC Input                   | 100 – 240 VAC, single phase   |
| 13                          | RF Input                   | 0 dBm max                     |
| 14                          | RF Input Signal Format     | CW/AM/FM/PM/Pulse             |
| 15                          | Class of Operation         | AB                            |
| <b><u>Mechanical</u></b>    |                            |                               |
| 16                          | Dimensions                 | 19" x 8.75" x 20"             |
| 17                          | Weight                     | 80 lb. max                    |
| 18                          | Connectors                 | Type-N                        |
| 19                          | Grounding                  | Chassis                       |
| 20                          | Cooling                    | Internal Forced Air           |
| <b><u>Environmental</u></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.

### CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage

### ORDERING MODELS

- ◇ R - Rear Connectors
- ◇ F - Front Connectors



FE Model Shown