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MODEL 5084

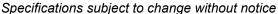
0.01-230 MHz 25 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5084 is a 25 Watt broadband amplifier that covers the 0.01-230 MHz frequency range. This amplifier utilizes Class A 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 operation with proven reliability, Like all OPHIR_{RF} amplifiers, the 5084 comes with an extended five-year warranty backed by Ophir RF's commitment to total customer satisfaction.

| | <u>Parameter</u> | Specification @ 25° C |
|----------------------|------------------------|----------------------------------|
| Electrical | | |
| 1 | Frequency Range | 0.01-230 MHz |
| 2 | Saturated Output Power | 25 Watts Nominal |
| 3 | Power at P1dB | 15 Watts Nominal |
| 4 | Small Signal Gain | +43 dB Minimum |
| 5 | Gain Flatness | <u>+</u> 2.0 dB Maximum |
| 6 | IP ₃ | +48 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -15dBc typ @ 15Watts |
| 9 | Spurious Signals | < -60dBc typ @ 15Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | AC Input Power | 300 Watts Maximum |
| 12 | AC Input | 100 – 240 VAC single phase |
| 13 | RF Input | 0 dBm Nominal +3 dBm Maximum |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse |
| 15 | Class of Operation | Class A |
| <u>Mechanical</u> | | |
| 16 | Dimensions (3RU) | 19" x 5.25" x 20" |
| 17 | Weight | 26 Lbs. |
| 18 | RF 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 |



ORDERING MODELS

- RE Rear RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232
- FE Front RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232
- R Rear RF Connector model
- F Front RF Connector model



Approved By: Date:



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FRONT PANEL CONTROLLER FEATURES

- Forward Power Monitoring (dBm or Watts)
- Reflected Power Monitoring (dBm or Watts)
- Gain Control (20 dB dynamic range of adjustment)
- ♦ Fault Status
- Full Protection Of any VSWR Condition, Open or Short, into any Phase Angle
- ♦ Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports
- Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level
- ♦ Standby/Enable Control
- ♦ Front Panel Display for easy viewing of System Status Locally
- Keypad buttons for full local control

CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current
- ♦ Over Voltage
- > Open or Short VSWR Conditions (With Front Panel Controller)

CIRCUIT CONTROL (WITH FRONT PANEL CONTROLLER)

- Standby (amplifier disable)
- Gain/power setting with 20dB range
- VSWR protection Reset
- ♦ ALC On/ Off

CIRCUIT INDICATIONS (WITH FRONT PANEL CONTROLLER)

- ♦ Forward Power
- Reflected power
- ♦ VSWR Fault
- ♦ Temp Fault
- Gain Setting (VVA) percentage

RFPA SYSTEM OPTIONS

- Switched Filter Bank
- ♦ Input Power Requirements
- ♦ Ruggedized Version
- Cabinet Requirements
- ♦ Outdoor Version
- ♦ Sample Ports
- ♦ Racking Options
- ♦ Many More!
- Consult Factory with Specific Requirements



