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MODEL 5126RE-900

20 - 1000 MHz
120 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5126RE-900 is a 120 Watt broadband amplifier that covers the 20 – 1000 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB 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 5126RE-900 comes with an extended multiyear warranty.

| | Parameter | Specification @ 25° C |
|-----------------------------|--------------------------|-------------------------------|
| <u>Electrical</u> | | |
| 1 | Frequency Range | 20 – 1000 MHz |
| 2 | Saturated Output Power | 120 Watts typical |
| 3 | Power Output @ 1dB Comp. | 70 Watts min |
| 4 | Small Signal Gain | +52 dB min |
| 5 | Gain Flatness | ± 2.0 dB max |
| 6 | IP ₃ | +55 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -20 dBc typical @ 70 Watts |
| 9 | Spurious Signals | < -60 dBc typical @ 70 Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | AC Input Power | 1500 Watts max |
| 12 | AC Input | 110 – 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 |
| <u>Mechanical</u> | | |
| 16 | Dimensions | 19" x 7" x 20" |
| 17 | Weight | 60 lb. max |
| 18 | Connectors | Type-N |
| 19 | Grounding | Chassis |
| 20 | Cooling | Internal Forced Air |
| <u>Environmental</u> | | |
| 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 INDICATIONS

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

- ◇ Customer Specific Front Panel
- ◇ Front Panel Controller
- ◇ Rear Panel Mounted DB9-Female for External RF Enable / Standby Control

NOTE: Pin **5** is GND, Pin **1** is the Control Line.

- IF Pin 1: OPEN - RF Standby Condition (Nominal Gain - 30dB min.)
- IF Pin 1: GND - RF Enabled (Amplifier in Normal Operation) (< 100mA to Activate)

CIRCUIT PROTECTIONS

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