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MODEL 5143
0.7 - 3.0 GHz
50 WATTS
LINEAR POWER RF AMPLIFIER

**Solid State
 Broadband High
 Power RF Amplifier**

The 5143 is a 50 Watt broadband amplifier that covers the 0.7 – 3.0 GHz 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 5143 comes with an extended multiyear warranty.

| | Parameter | Specification @ 25° C |
|----------------------|----------------------------|-------------------------------|
| Electrical | | |
| 1 | Frequency Range | 0.7 – 3.0 GHz |
| 2 | Saturated Output Power | 50 Watts rated |
| 3 | Power Output @ 1dB Comp. | 40 Watts min |
| 4 | Small Signal Gain | +48 dB min |
| 5 | Small Signal Gain Flatness | ± 2.0 dB max |
| 6 | IP ₃ | +56 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -20 dBc typical @ 40 Watts |
| 9 | Spurious Signals | < -60 dBc typical @ 40 Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | AC Input Power | 600 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 |
| Mechanical | | |
| 16 | Dimensions | 19" x 5.25" x 20" |
| 17 | Weight | 48 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.

CIRCUIT PROTECTIONS

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

ORDERING MODELS

- ◇ R - Rear Panel Connectors
- ◇ F - Front Panel Connectors
- ◇ RE - R model w/Control Option
- ◇ FE - F model w/Control Option
- ◇ RT - RE model w/Ethernet Interface
- ◇ FT - FE model w/Ethernet Interface



F Model Shown

Approved By: _____ Date: _____