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MODEL 5182-300

3.5 - 4.0 GHz 30 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5182-300 is a 30 Watt broadband amplifier that covers the 3.5 - 4.0 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide 3rd order excellent an 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 with operation proven reliability. Like all OPHIR_{RF} amplifiers, the 5182-300 comes with an extended multiyear warranty.

CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current
- ◊ Over Voltage
- ♦ Output Circulator Installed

ORDERING MODELS

- ♦ R Rear Panel Connectors
- ◊ F Front Panel Connectors
- ♦ RE R model w/Control Option
- ♦ FE F model w/Control Option

| | <u>Parameter</u> | Specification @ 25° C | |
|----------------------|---|---|--|
| <u>Electrical</u> | | | |
| 1 | Frequency Range | 3.5 – 4.0 GHz | |
| 2 | Saturated Output Power | 30 Watts typical | |
| 3 | Power Output @ 1dB Comp. | 24 Watts min | |
| 4 | Small Signal Gain | +46 dB min | |
| 5 | Small Signal Gain Flatness | <u>+</u> 1.5 dB max | |
| 6 | DC Blanking TTL High = on TTL Low = off | 300µS max (On/Off via Rear BNC Connector) | |
| 7 | Blanking Isolation | 40dB min | |
| 8 | IP ₃ | +54 dBm typical | |
| 9 | Input VSWR | 2.0:1 max | |
| 10 | Output VSWR | 1.5:1 max | |
| 11 | Harmonics | -40 dBc max @ 24 Watts | |
| 12 | Spurious Signals | < -60 dBc typical @ 24 Watts | |
| 13 | Noise Figure | 8 dB max | |
| 14 | Input/Output Impedance | 50 Ohms nominal | |
| 15 | AC Input Power | 350 Watts max | |
| | AC Input | 100 – 240 VAC, single phase | |
| | RF Input | +10 dBm max | |
| | RF Input Signal Format | CW/AM/FM/PM/Pulse | |
| | Class of Operation | A/AB | |
| <u>Mechanical</u> | | | |
| 16 | Dimensions | 19" x 5.25" x 20" | |
| 17 | Weight | 35 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.



03/10

| Approved By: | Date: |
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| Annroved BV | 1316. |
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