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MODEL 6003
200 - 500 MHz
300 WATTS
RF AMPLIFIER FOR NMR

Solid State Broadband High Power RF Amplifier

The 6003 is a 300 Watt broadband amplifier that covers the 200 – 500 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an pulse performance for NMR application.

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 6003 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

Specifications subject to change without notice

| <u>Electrical</u> | <u>Parameter</u> | <u>Specification @ 25° C</u> |
|-----------------------------|----------------------------|---------------------------------|
| 1 | Frequency Range | 200 – 500 MHz |
| 2 | Saturated Output Power | 300 Watts min |
| 3 | Power Output @ 1dB Comp. | 150 Watts min |
| 4 | Small Signal Gain | +55 dB min |
| 5 | Small Signal Gain Flatness | ± 2.0 dB max |
| 6 | Blanking | TTL |
| 7 | Blanking Isolation | 50dB min |
| 8 | Blanking speed | 20uS Off to On 5uS On to Off |
| 9 | Input VSWR | 2:1 max |
| 10 | Harmonics | -20 dBc typical @ 150 Watts |
| 11 | Spurious Signals | > -60 dBc typical @ 150 Watts |
| 12 | Blanking | TTL |
| 13 | AC Input Power | 1400 Watts max |
| 14 | AC Input | 100 – 240 VAC, single phase |
| 15 | RF Input | 0 dBm Max |
| 16 | Pulse Droop @ 10uS pulse | 0.25dB Maximum |
| <u>Mechanical</u> | | |
| 17 | Dimensions | 19" x 5.25" x 20" |
| 18 | Weight | 48 lb. max |
| 19 | Connectors | Type-N |
| 20 | Grounding | Chassis |
| 21 | Cooling | Internal Forced Air |
| <u>Environmental</u> | | |
| 22 | Operating Temperature | 0° C to +50° C |
| 23 | Operating Humidity | 95% Non-condensing |
| 24 | Operating Altitude | Up to 10,000' Above Sea Level |
| 25 | Shock and Vibration | Normal Truck Transport |



F MODEL SHOWN

ORDERING MODELS

- ◇ R – Rear RF Connector model
- ◇ F – Front RF Connector model

CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage
- ◇ Open and Short Protection

CONTROL & INDICATIONS

- ◇ AC Circuit Breaker
- ◇ TTL Control for Blanking (BNC)
- ◇ Temperature Fault

