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MODEL 5304042

3100-3600 MHz 100 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5304042 is a 100 Watt broadband amplifier that covers the 3100-3600 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 this amplifier components. achieves high efficiency operation with proven reliability. Like all OPHIR_{RF} the 5304042 amplifiers, comes with an extended multiyear warranty.

| Specifications | subject to | change | without | notice |
|----------------|------------|--------|---------|--------|
| | | | | |

| | <u>Parameter</u> | Specification @ 25° C | | |
|----------------------|-------------------------------------|-----------------------------------------------|--|--|
| <u>Electrical</u> | | | | |
| 1 | Frequency Range | 3100-3600 MHz | | |
| 2 | Output Power CW (P _{SAT}) | 100 Watts Min | | |
| 3 | Ouput Power CW (P _{1dB}) | 50 Watts Min | | |
| 4 | Small Signal Gain | +51 dB min | | |
| 5 | Gain Flatness | <u>+</u> 2.5 dB max | | |
| 6 | IP ₃ | +54 dBm typical | | |
| 7 | Input VSWR | 2:1 max | | |
| 8 | Harmonics | -25 dBc typical | | |
| 9 | Spurious Signals | < -60 dBc typical | | |
| 10 | Noise Figure | < 10 dB | | |
| 11 | Input/Output Impedance | 50 Ohms nominal | | |
| 12 | DC Input | 28 VDC nominal | | |
| 13 | RF Input | +0 dBm max | | |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse | | |
| 15 | Class of Operation | A/AB | | |
| <u>Mechanical</u> | | * | | |
| 16 | Dimensions | 3.4" x 8.9" x 1.5" | | |
| 17 | Weight | 3.5 lb. max | | |
| 18 | Connectors | (RF Input) SMA female (RF Output) N female | | |
| | DC & Control Connector | ITT, Cannon Series II | | |
| 19 | Grounding | Chassis | | |
| 20 | Cooling | Adequate Heatsink Required | | |
| <u>Environmental</u> | | | | |
| 21 | Baseplate Temperature | -40° C to +85° C | | |
| 22 | Operating Humidity | 95% Non-condensing | | |
| 23 | Operating Altitude | Up to 40,000' Above Sea Level | | |
| 24 | Shock and Vibration | MIL-STD-810F (Method 516.5) | | |

PRISE/Fall Time < 5uSec

Available Options

- ♦ Heatsink and Fans
- ♦ Integrated Output Isolator
- ♦ Output Directional Coupler
- ♦ Available as 19" Rack Mount Unit
- ♦ Many Other options Available
- ♦ Consult Factory for other options

Approved By: ______ Date: _____