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MODEL 5304022

100-500 MHz 25 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5304022 is a 25 Watt broadband amplifier that covers the 100-500 MHz frequency range. This small lightweight amplifier and utilizes Class A/AB linear power devices that provide 3rd excellent order an 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} 5304022 amplifiers, the comes with an extended multiyear warranty.

| | <u>Parameter</u> | Specification @ 25° C |
|----------------------|------------------------|-------------------------------|
| Electrical | | |
| 1 | Frequency Range | 100-500 MHz |
| 2 | Output Power @ P3dB | 25 Watts min |
| 3 | Small Signal Gain | +45 dB min |
| 4 | Gain Flatness | <u>+</u> 1.5 dB max |
| 5 | IP ₃ | +49 dBm typical |
| 6 | Input VSWR | 2:1 max |
| 7 | Harmonics | -20 dBc typical |
| 8 | Spurious Signals | < -60 dBc typical |
| 9 | Noise Figure | < 10 dB |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | Efficiency (PAE) | >40% |
| 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 | 2.5" x 6.0" x 1.1" |
| 17 | Weight | 2.0 lb. max |
| 18 | Connectors | SMA female |
| 19 | Grounding | Chassis |
| 20 | Cooling | Adequate Heatsink Required |
| <u>Environmental</u> | | |
| 21 | Baseplate 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 | MIL-STD-810F (Method 516.5) |

Specifications subject to change without notice



DC Blanking

♦ Rise/Fall Time < 10uSec

11/09 Approved By: Date: