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## MODEL 5802054-002

2.4 - 2.5 GHz **5 WATTS** 

## **Solid State Band-specific High Power RF Amplifier**

The 5802054-002 is a 5 Watt band-specific amplifier that covers the 2.4 - 2.5 GHz frequency range. This small lightweight and amplifier utilizes Class A/AB linear power devices that provide 3<sup>rd</sup> excellent 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 high achieves efficiency operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5802054-002 comes with an extended

|                      | Parameter                  | Specification @ 25° C  |
|----------------------|----------------------------|--|
| Electrical           | <u>i arameter</u>          | Specification to 25°C  |
| Electrical           |                            |  |
| 1                    | Frequency Range            | 2.4 – 2.5 GHz  |
| 2                    | Saturated Output Power     | 5 Watts typical  |
| 3                    | Power Output @ 1dB Comp.   | 4 Watts min  |
| 4                    | Small Signal Gain          | +38 dB min   |
| 5                    | Gain Flatness              | <u>+</u> 0.75 dB max   |
| 6                    | IP <sub>3</sub>            | +46 dBm typical  |
| 7                    | Input VSWR                 | 2:1 max  |
| 8                    | Harmonics                  | -20 dBc typical @ 4 Watts  |
| 9                    | Spurious Signals           | -60 dBc typical @ 4 Watts  |
| 10                   | Input/Output Impedance     | 50 Ohms nominal  |
| 11                   | DC Input Current           | 2.3 Amps max   |
| 12                   | DC Input                   | 13 VDC   |
| 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 (with heatsink) | 4.0" x 2.8" x 3.5"   |
| 17                   | Weight (with heatsink)     | 4 lb. max  |
| 18                   | Connectors                 | SMA female   |
| 19                   | Grounding                  | Chassis  |
| 20                   | Cooling                    | Needs 2" Clearing From Fan   |
| <u>Environmental</u> |                            |  |
| 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. |

## **FEATURES**

- ♦ Private Label
- ♦ Heatsink and Fan Included
- ♦ Enable/Disable Control via 9 pin D-Sub connector
- ♦ Forward Power Monitor, 0 4 Volts, via 9 pin D-Sub connector (TSSI)

## 9 PIN D-Sub Connector