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## **MODEL 5303109**

1.0-2.0 GHz 25 WATTS LINEAR POWER RF AMPLIFIER

## Solid State Band-specific High Power RF Amplifier

The 5303109 is an 25 Watt broadband amplifier that covers the 1.0-2.0 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3<sup>rd</sup> 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 achieves high efficiency operation with proven reliability.

|                      | Develope                 | Cracification @ 25° C         |
|----------------------|--------------------------|-------------------------------|
|                      | <u>Parameter</u>         | Specification @ 25° C         |
| <u>Electrical</u>    |                          |                               |
| 1                    | Frequency Range          | 1.0-2.0 GHz                   |
| 2                    | Saturated Output Power   | 25 Watts typical              |
| 3                    | Small Signal Gain        | +43 dB min                    |
| 4                    | Gain Flatness            | <u>+</u> 3.5 dB max           |
| 5                    | IP <sub>3</sub>          | +52 dBm min                   |
| 6                    | Input / Output VSWR      | 2:1 max                       |
| 7                    | Harmonics                | -20 dBc typical               |
| 8                    | Spurious Signals         | < -60 dBc typical             |
| 9                    | Input / Output Impedance | 50 Ohms nominal               |
| 10                   | DC Input Current         | 12Amps max                    |
| 11                   | DC Input                 | 13 VDC nominal                |
| 12                   | RF Input                 | +20dBm Maximum                |
| 13                   | RF Input Signal Format   | CW/AM/FM/PM                   |
| 14                   | Class of Operation       | A/AB                          |
| <u>Mechanical</u>    |                          |                               |
| 15                   | Dimensions               | 6.55" x 4" x 1.1"             |
| 16                   | Weight                   | 3 lb. max                     |
| 17                   | Connectors               | SMA female                    |
| 18                   | Grounding                | Chassis                       |
| 19                   | Cooling                  | Adequate Heat sink Required   |
| <u>Environmental</u> |                          |                               |
| 20                   | Baseplate Temperature    | 0° C to +50° C                |
| 21                   | Operating Humidity       | 95% Non-condensing            |
| 22                   | Operating Altitude       | Up to 10,000' Above Sea Level |
| 23                   | Shock and Vibration      | Normal Truck Transport        |

Specifications subject to change without notice



08/09

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_