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MODEL 5303106-001

0.01 - 50 MHz
200 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5303106-001 is a 200 Watt broadband amplifier that covers the 0.01 – 50 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 components, this amplifier achieves high efficiency operation with proven reliability.

| D-Sub 1 | |
|---------|---------------|
| Pin | Description |
| 1 | +32 to 42 Vdc |
| 2 | +32 to 42 Vdc |
| 3 | NC |
| 4 | NC |
| 5 | NC |
| 6 | +32 to 42 Vdc |
| 7 | +32 to 42 Vdc |
| 8 | NC |
| 9 | NC |

| D-Sub 2 | |
|---------|-----------------|
| Pin | Description |
| 1 | NC |
| 2 | NC |
| 3 | NC |
| 4 | NC |
| 5 | Temp Indication |
| 6 | NC |
| 7 | NC |
| 8 | NC |
| 9 | Enable/Disable |

| | Parameter | Specification @ 25° C |
|----------------------|----------------------------|--|
| Electrical | | |
| 1 | Frequency Range | 0.01 – 50 MHz |
| 2 | Output power @ Psat | 200 Watts min* |
| 3 | Power Output @ 1dB Comp. | 100 Watts min* |
| 4 | Small Signal Gain | +20 dB min |
| 5 | Small Signal Gain Flatness | +/-1.5 dB max |
| 6 | Input VSWR | 2:1 max |
| 7 | Harmonics | -20 dBc max |
| 8 | Spurious Signals | < -60 dBc |
| 9 | Input/Output Impedance | 50 Ohms nominal |
| 10 | DC Input Power | 14 A max* |
| 12 | DC Input | 32 to 42 Vdc |
| 13 | RF Input Power | +33 to+37 dBm nominal |
| 14 | Class of Operation | A/AB |
| 15 | Interface | D-sub |
| 16 | Module Enable | Logic : 3-5 Vdc = enable < 0.5 Vdc = disable |
| 17 | Temperature Indication | LM35 0.1V/10°C |
| Mechanical | | |
| 18 | Dimensions | 12" x 8" x 5" (TBD) |
| 19 | Weight | 25 lbs. max |
| 20 | Connectors | SMA for RF input Type-N for RF Output D-sub for control & indications Ground lug for Ground |
| 21 | Grounding | Chassis |
| 22 | Cooling | Adequate heatsink and fans required |
| Environmental | | |
| 24 | Ambient Temperature | -20° C to +65° C |
| 25 | Operating Humidity | 95% Non-condensing |
| 26 | Operating Altitude | Up to 10,000' Above Sea Level |
| 27 | Shock and Vibration | Normal Truck Transport |

Specifications subject to change without notice

*Data taken at +42 Vdc input