

X Band SSPA Modules

General Information

Locus Microwave, Inc. X Band Solid State Power Amplifier modules provide a combination of superior performance, reliability and cost effectiveness in a slim and compact package.

All units are carefully designed with consideration for the electrical, mechanical and thermal requirements.

Specifications included are for standard products. Please contact the factory for your custom/specific performance needs.

Features:

- Efficient module packaging
- 47 dBm output
- Temperature Compensation of Gain
- Output Isolator
- Regulator & Bias Sequencing

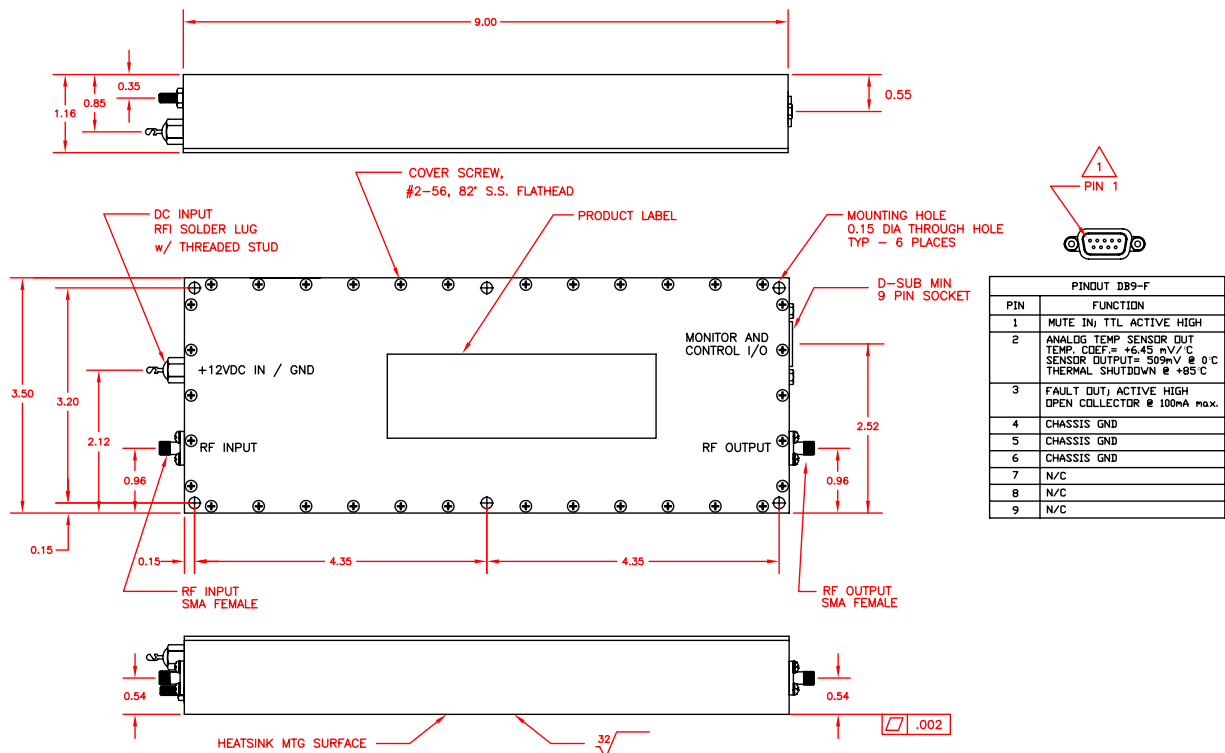
Options:

- Power Mute
- Analog Temperature Sense
- Fault Alarm

Outline Drawing

NOTES:

1 D-CONNECTOR INCLUDED ONLY WHEN 1 OR MORE MONITOR & CONTROL OPTIONS ARE PROVIDED





S61000-047 50 w X Band SSPA

| | Range | Units | Notes |
|--|---|-------------|--|
| Electrical Specifications | | | |
| Frequency | 7.900-8.400 | GHz | |
| Gain ¹ | 48 min., 52 typ. | dB | |
| Gain Flatness | | | |
| Full Band | +/-1.0 max. | dB | |
| Per 40 MHz Segment | +/-0.20 | dB | |
| Gain Stability vs. temperature | +/-2.0 typ. | dB | |
| P _{1dB} ¹ | | | |
| -047 | +46 min., 47.0 typ. | dBm | |
| P _{sat} ¹ | | | |
| -047 | +47.3 typ. | dBm | |
| Third Order Intermodulation Distortion | -25 max. | dBc | @3 dB backoff relative to rated P _{1dB} |
| VSWR | | | |
| Input/Output (isolators included) | 1.30/1.25 max. | :1 | |
| Power Requirement | | | |
| Input Voltage (includes sequencing) | +11 to +13 | vdc | |
| Current | | | |
| -047 | 22.0 nom. | A | @ P _{1dB} |
| M&C Function | Mute, Temp. Monitor, Fault | | Option |
| Mechanical Specifications | | | |
| Outline | 3.5 x 9.0 x 1.16 (88.9 x 228.6 x 29.5) | in. (mm) | L X W X H |
| Weight (approximate) | 2.4 (1.08) | lbs. (kg) | |
| Connectors | | | |
| RF Input | SMA | Female | |
| RF Output | SMA | Female | |
| Power | Solder Lug RFI Filter | | |
| Monitor & Control | D-Subminiature | Socket | Option |
| Environmental | | | |
| Operating Baseplate Temperature | -40 to +60 | °C | |
| Humidity | 100 | % | without condensation |

Notes:

1. Other output powers and gains available.

Specifications are subject to change at the discretion of Locus Microwave, Inc.

176 Technology Dr., Suite 200, Boalsburg, PA 16827 USA • Tel: +1 814 466 6275 • Fax: +1 814 466 1104

www.locusmicrowave.com