

C Band SSPA Modules

General Information

Locus Microwave, Inc. C 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
- Choice of 41, 42 or 44 dBm output
- Temperature Compensation of Gain
- Input/Output Isolators
- Regulator & Bias Sequencing

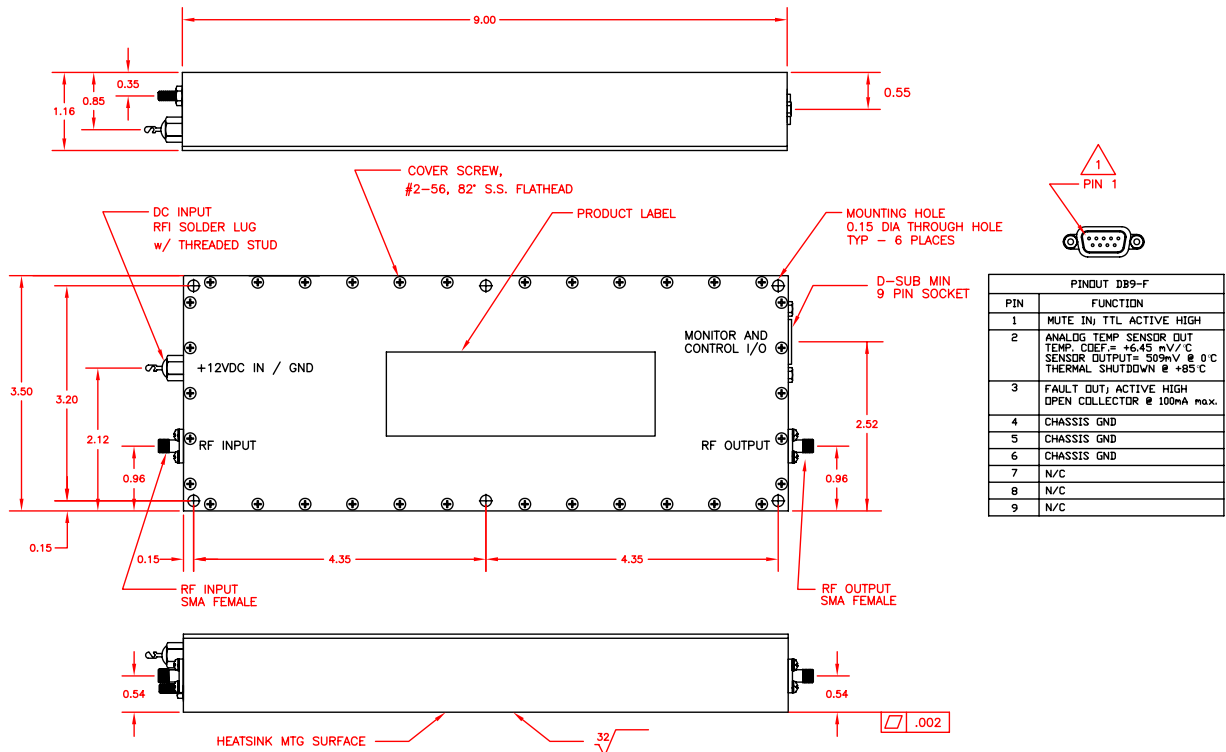
Options:

- Power Mute
- Analog Temperature Sense
- Fault Alarm

Outline Drawing

NOTES:

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





S51000 Series 12/16/25 w C Band SSPAs

	Range	Units	Notes
Electrical Specifications			
Frequency ¹	5.850-6.425	GHz	
Gain	44 min.	dB	
Gain Flatness			
Full Band	+/-1.0 max.	dB	
Per 40 MHz Segment	+/-0.20	dB	
Gain Stability vs. temperature	+/-2.0	dB	
P _{1dB} ^{1,2}			
-041	+40 min., 40.8 typ.	dBm	
-042	+41 min., 41.5 typ.	dBm	
-044	+43 min., +43.5 typ.	dBm	
P _{sat} ^{1,2}			
-041	+41 typ.	dBm	
-042	+42 typ.	dBm	
-044	+44 typ.	dBm	
Third Order Intermodulation Distortion	-25 max.	dBc	@3 dB backoff relative to rated P _{1dB}
VSWR			
Input/Output	1.30/1.25 max.	:1	
Power Requirement			
Input Voltage	+11 to +13	vdc	
Current			
-041	6.2 nom.	A	
-042	7.4 nom.	A	
-044	10.2 nom.	A	
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)	2.5 (1.14)	lbs. (kg)	
Connectors			
RF Input	SMA	Female	
RF Output	SMA	Female	
Power	Solder Lug RFI Filter		
Environmental			
Operating Baseplate Temperature	-40 to +60	°C	
Humidity	100	%	without condensation

Notes:

- Extended band (5.85-6.725 GHz, S51400 series) available.
- Linearly derate by 1.0 dB from 6.425 to 6.725 GHz with extended band option.

Options:

- Option 1: Type N Female Input/Output connectors

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