

PRELIMINARY

S71 Series Solid State Power Amplifier (SSPA)

General Information

Locus Microwave, Inc. Ku-Band Solid State Power Amplifier modules provide a combination of superior performance, reliability and cost effectiveness in a compact package. All units are carefully designed with consideration for the electrical, mechanical and thermal requirements.

Features:

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

Options:

- Power Mute
- Analog Temperature Sense
- Fault Alarm



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	Range	Units	Notes
Electrical Specifications			
Frequency	13.75-14.50	GHz	
Gain	50 min., 54 typ.	dB	
Gain Flatness			
Full Band	+/-1.5 max.	dB	
Per 40 MHz Segment	+/-0.3	dB	
Gain Stability vs. Temperature	+/- 2.0 typ.	dB	
P _{1dB}	+43.5 min., 44.5 typ.	dBm	
P _{sat}	45 typ.	dBm	
Third Order Intermodulation Distortion	-25 max	dBc	@ 3 dB total power backoff relative to rated P _{1dB}
Input VSWR	1.30 max.	:1	
Output VSWR	1.25 max.	:1	
Power Requirement			
Input Voltage	+11 to +13	VDC	
Current	15 nom.	A	small signal
Current	20 nom.	A	saturated power
M&C Function	Mute, Temp. Monitor, Fault		
Mechanical Specifications			
Outline	LMI Dwg #10375		
Weight	2.4 (1.08) nom.	lbs. (kg)	
Connectors			
RF Input	SMA	Female	
RF Output	SMA	Female	
Power	Solder Lug RFI Filter		
Monitor & Control	D-Subminiature	Socket	
Environmental			
Operating Baseplate Temperature	-40 to +60	°C	
Humidity	100	%	without condensation

