

Medium Power Ku Band SSPA Modules

General Information

Locus Microwave, Inc. S71000 Ku 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.

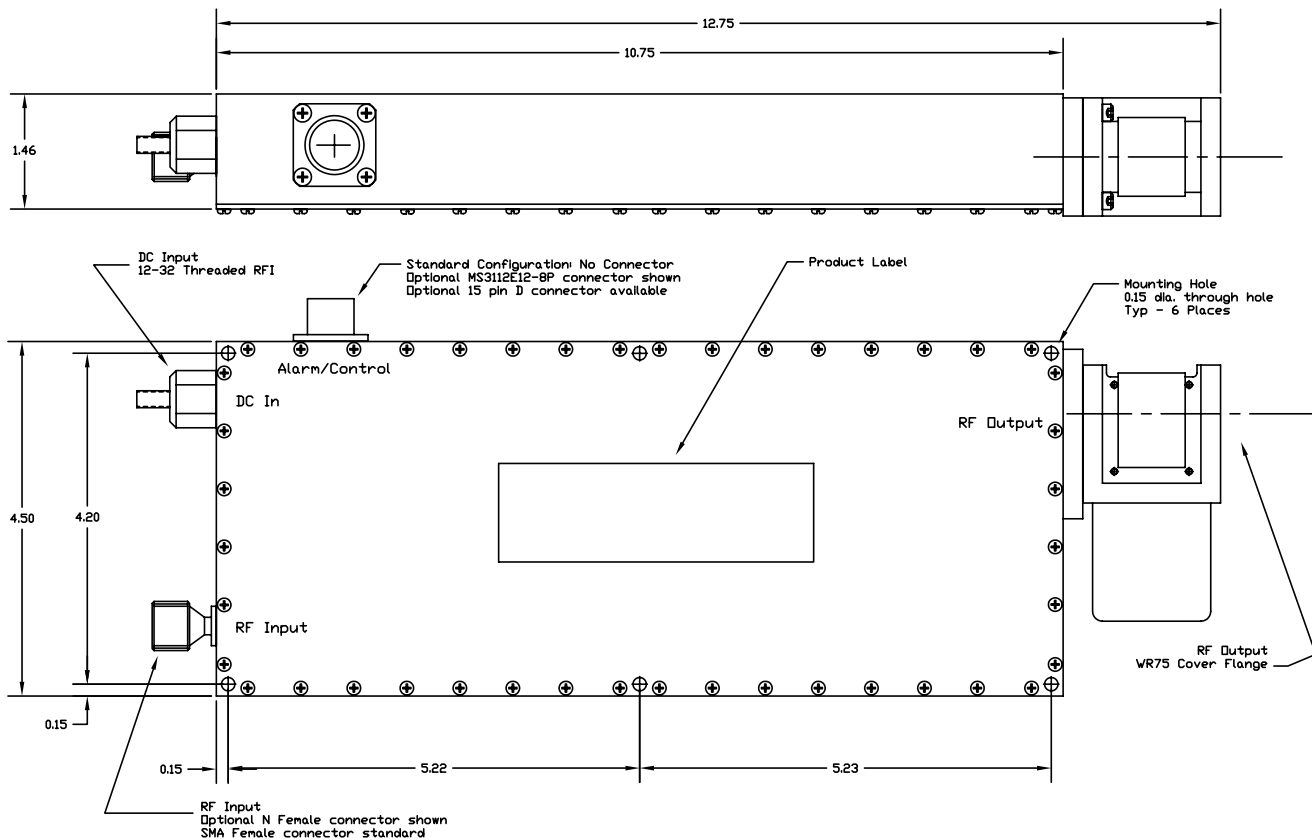
Specifications included are for standard products. Please contact the factory for your custom/specific performance needs.



Features:

- Choice of 45, 46 or 47 dBm output
- Temperature Compensation of Gain
- Input/Output Isolators
- Regulator & Bias Sequencing

Outline Drawing





S71000 Series 30/40/50 w Ku Band SSPAs

	Range	Units	Notes
Electrical Specifications			
Frequency ¹	14.00-14.50 or 13.75-14.50	GHz	
Gain	54 min.	dB	
Gain Flatness			
Full Band	+/-1.5max.	dB	
Per 40 MHz Segment	+/-0.20	dB	
Gain Stability vs. temperature	+/-2.0	dB	
P _{1dB} ^{1,2}			
-045	+44 min., 44.6 typ.	dBm	
-046	+45 min., 45.6 typ.	dBm	
-047	+46 min., +46.5 typ.	dBm	
P _{sat} ^{1,2}			
-045	+45 typ.	dBm	
-046	+46 typ.	dBm	
-047	+47 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			
-045	17 nom.	A	
-046	28 nom.	A	
-047	36 nom.	A	
Mechanical Specifications			
Outline	4.5 x 12.75 x 1.5 (114.3 x 323.8 x 38.1)	in. (mm)	L X W X H
Weight (approximate)	5.5 (2.5)	lbs. (kg)	
Connectors			
RF Input	SMA	Female	N Female optional
RF Output	WR75 Cover Flange		
Power	Threaded RFI Filter		
Fault/Control	MS3112E12-8P or 15 Pin D		Optional
Environmental			
Operating Baseplate Temperature	-40 to +50	°C	
Humidity	100	%	without condensation

Notes:

- Specify at time of order.
- Derate by 0.5 dB with the 13.75-14.50 GHz Band Option.

Options:

- Option 1: Type N Female Input connector
- Option 2: N/A
- Option 3: Control I/O (mute, fault alarm, temperature indication)
- Option 4: Detected RF Output (+4 V nom. @ P1dB)
- Option 5: RF Sample Port (-40 dBc nom.)
- Option 6: Gain Adjust (20 dB range, continuous)

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

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