



S51002 Series 80/100 w C Band SSPAs

	Range	Units	Notes
Electrical Specifications			
Frequency ¹	5.850-6.425	GHz	
Gain	54 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}			
-049	+48 min., 48.3 typ.	dBm	
-050	+49 min., 49.5 typ.	dBm	
P _{sat} ^{1,2}			
-049	+49 typ.	dBm	
-050	+50 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			
-049	30 nom.	A	
-050	37 nom.	A	
Mechanical Specifications			
Outline	4.50 x 14.25 x 1.53 (114.3 x 362 x 38.9)	in. (mm)	L X W X H
Weight (approximate)	2.4 (1.08)	lbs. (kg)	
Connectors			
RF Input	SMA	Female	
RF Output	CMR137 WG Flange		
Power	Threaded RFI Filter		
Fault/Control	MS3112E12-8P or 15 Pin D		Optional
Environmental			
Operating Baseplate Temperature	-40 to +60	°C	
Humidity	100	%	without condensation

Notes:

- Extended band (5.85-6.725 GHz, S51402 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 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., SMA Female conn.)
- Option 6: Manual Gain Adjust (20 dB range, continuous)

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

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