Solid State High Power Amplifier

250 kHz - 1000 MHz, Wide Instantaneous Bandwidth, Built-in protection

Broadband Series: PA1067

FEATURES

Class AB linear LDMOS design
250 kHz - 1000 MHz
10 Watt output power
40 dB gain
28 Volt operation
Suitable for all modulations standards

Fully protected – load VSWR, input overdrive, over/under supply voltage, overcurrent

APPLICATIONS

Broadband jamming
Electronic warfare
EMI / EMC test equipment

Wideband. Agile. Powerful. Compact.

Spectrum management.

The first task is to get your message through. The second is to prevent the other guy from getting *his* message through. The MtronPTI PA1067 Solid State Power Amp provides a minimum of 10 Watts of CW power across the full bandwidth and less than 4.0 dB_{P-P} gain flatness to meet the needs of broadband spectrum control.

With full power operation from 250 kHz to 1000 MHz and built in VSWR protection, the PA1067 has 40 dB of gain, perfect for stand-alone, array or TWT driver applications.

MtronPTI's line of Solid State Power Amplifiers is backed by a multi-national design and manufacturing team with more than 150 years combined PA design experience. MtronPTI's continuing focus on client service ensures full program life engineering support from specification to production to next generation architecture planning.

Like all MtronPTI's SSPAs, the PA1067 is also available integrated with power supply, cooling and communications interface as a rack mountable unit for laboratory or fixed location applications.

EA-6B Prowler – U.S. Navy photo by Photographer's Mate 3rd Class Martion S. Fuentes. (RELEASED)

2525 Shader Road, Orlando FL 32804
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Electrical Characteristics

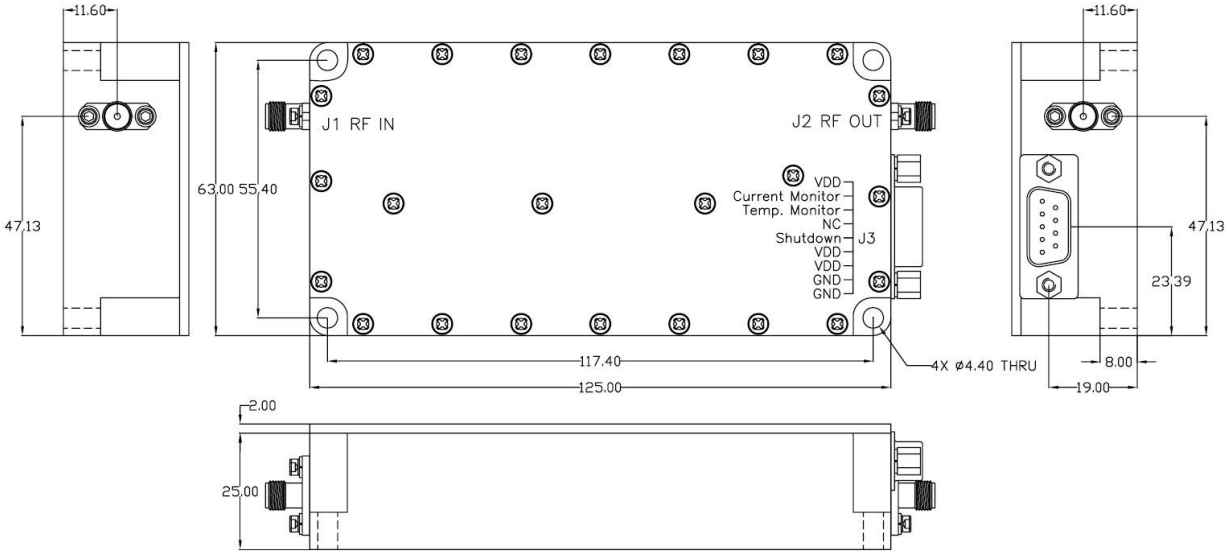
Parameter	Symbol	Min.	Typ.	Max.	Units	Comment
PASSBAND						
Operating Frequency Range	$F_{CARRIER}$	0.25		1000	MHz	
Power Output	P_{OUT_MIN}	10			Watts	CW
Small Signal Gain	A_{RF_MIN}	40			dB	
Power Gain Flatness				4.0	dB_{P-P}	$A_{RF\_MAX} - A_{RF\_MIN}$
Input Return Loss	RL_{IN}	10			dB	Within the F_{SIG} bandwidth into 50Ω
2-tone Intermodulation (IMD)			-30		dBc	30 dBm/tone, Δ = 1 MHz
Harmonics			-20		dBc	At rated P_{OUT}
Non Harmonic Spurious				-60	dBc	
Power						
Operating Voltage	V_{DD}	28		30	V_{DC}	
Current Consumption	I_{DD}			2	A	
Max Input Power	P_{IN_MIN}			+10	dBm	Without damage
Load VSWR Protection			∞ : 1			

Environmental & Physical

Parameter	Symbol	Min.	Typ.	Max.	Units	Comment
Operating Case Temperature	T_{OC}	-20		+75	℃	
Storage Temperature	T_{STR}	-40		+85	℃	
Relative Humidity		5		95	%	Non-condensing
Dimensions			125 x 63 x 27		mm	Excluding connectors
Weight				300	gr.	
RF Connectors IN / OUT			SMA female			
DC Power / Interface Connector			9-pin Hybrid D-Sub			
Cooling			External Heat Sink			Forced air required

D-Sub Connector Pin Assignments	
1 FWD	N/A
2 VVA	Option 103 – Analog Gain Control
3 Current Sensor	I_D @ 50 mV / 100 mA typ.
4 Temperature Sensor	V_T @ 10 mV / ℃ + 500 mV typ.
5 Shutdown	TTL
6, 7 V_{DD}	28 V_{DC}
8, 9 GND	Ground

Case Outline (Standard)



Revision History

Date	Rev.	Orig.	Details of Revision
20150317	A	DPD	Initial release in 2015 format

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