



Solid State High Power Amplifier

6.0 – 18.0 GHz, Wide Instantaneous Bandwidth, Built-in protection

Broadband Series: PA1062

FEATURES

Class AB GaN design
6.0 – 18.0 GHz
40 Watt output power
46 dB gain
32 Volt operation

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

Available as a module or rack mounted

APPLICATIONS

Broadband jamming
Electronic warfare
EMI / EMC test equipment

Wideband. Agile. Powerful. Compact.

Control, use or deny the spectrum.

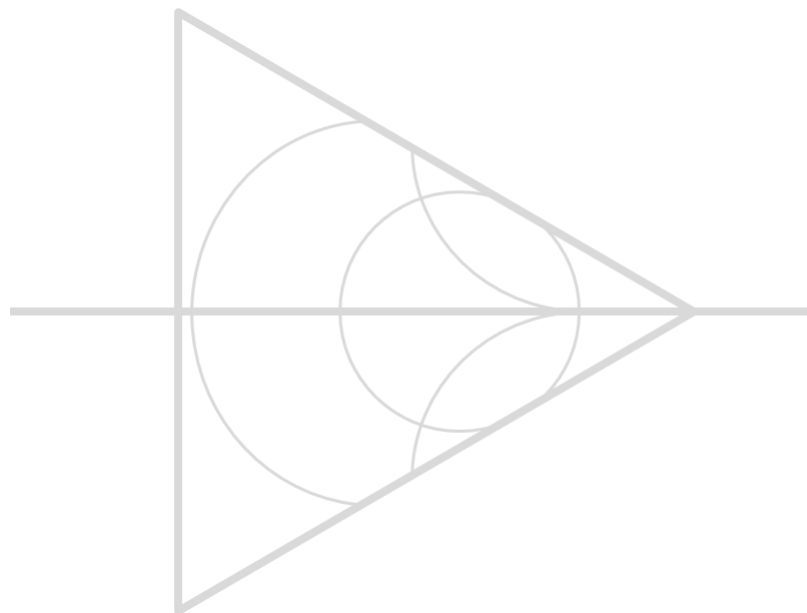
The first task is to get your message through. The second is to prevent the other guy from getting *his* message through. The MtronPTI PA1062 Solid State Power Amp provides up to 40 Watts of CW power across the full bandwidth and less than 4.0 dB_{P_P} gain flatness to meet the needs of broadband spectrum control.

With full power operation from 6.0 GHz to 18 GHz and built in VSWR protection, the PA1062 has 46 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 PA1062 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)



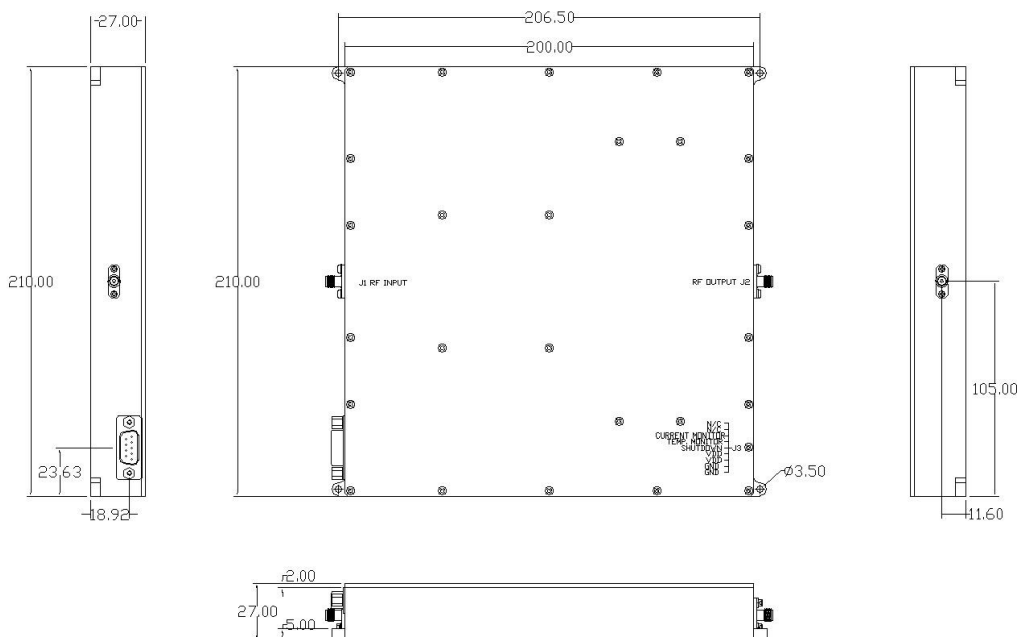
Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Units	Comment
PASSBAND						
Operating Frequency Range	F_{CARRIER}	6		18	GHz	CW $A_{\text{RF_MAX}} - A_{\text{RF_MIN}}$ Within the F_{SIG} bandwidth into 50Ω At rated P_{OUT}
Power Output	$P_{\text{OUT_MIN}}$	40			Watts	
Small Signal Gain	$A_{\text{RF_MIN}}$	46			dB	
Power Gain Flatness				4.0	dB _{P-P}	
Input Return Loss	RL_{IN}	10			dB	
Harmonics				-25	dBc	
Non Harmonic Spurious				-60	dBc	
Noise Figure	NF			8.0	dB	
Power						
Operating Voltage	V_{DD}	30		32	V_{DC}	Without damage
Current Consumption	I_{DD}			18	A	
Max Input Power	$P_{\text{IN_MIN}}$			+8	dBm	
Load VSWR Protection			∞ : 1			

Environmental & Physical

Parameter	Symbol	Min.	Typ.	Max.	Units	Comment
Operating Case Temperature	T_{OC}	-20		+75	°C	
Storage Temperature	T_{STR}	-40		+85	°C	
Relative Humidity		5		95	%	Non-condensing
Dimensions			200 x 210 x 27		mm	Excluding connectors
Weight			TBD			
RF Connectors IN / OUT			SMA Female			Cover Flange
DC Power / Interface Connector			7-pin Hybrid D-Sub			
Cooling			External Heat Sink			Forced air required
D-Sub Connector Pin Assignments						
1	N/C					Analog
2	N/C					Analog
3	Current Sensor					TTL
4	Temperature Sensor					32 V_{DC}
5	Shutdown					Ground
A1	V_{DD}					
A2	GND					

Case Outline



Revision History

Date	Rev.	Orig.	Details of Revision
20141118	A	DPD	Initial release in 2015 format

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MtronPTI may change specifications without notice to improve end application performance or product manufacturability.

Contact MtronPTI for the most up-to-date information.