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These areas

## **MODEL 5067**

20 - 1000 MHz 300 WATTS LINEAR POWER RF AMPLIFIER

## Solid State Broadband High Power RF Amplifier

The 5067 is a 300 Watt broadband amplifier that covers the 20 – 1000 MHz frequency range. This amplifier utilizes Class A/AB linear power devices that provide an excellent  $3^{rd}$  order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5067 comes with an extended multiyear warranty.

## **CIRCUIT PROTECTIONS**

- Overload
- Over Current
- ◊ Over Voltage

## **ORDERING MODELS**

 ◊ F - Front Panel Connectors
◊ FE - Front Panel Connectors and Control Option

ParameterSpecification @ 25° CElectricalImage: Constraint of the system of t			
1Frequency Range20 - 1000 MHz2Saturated Output Power300 Watts typical3Power Output @ 1dB Comp.180 Watts min4Small Signal Gain+56 dB min5Gain Flatness± 2.0 dB max6IP3+58 dBm typical7Input VSWR2:1 max8Harmonics-20 dBc typical @ 180 Watts9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input200 - 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationAB16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing		Parameter Parameter	Specification @ 25° C
2Saturated Output Power300 Watts typical3Power Output @ 1dB Comp.180 Watts min4Small Signal Gain+56 dB min5Gain Flatness± 2.0 dB max6IP3+58 dBm typical7Input VSWR2:1 max8Harmonics-20 dBc typical @ 180 Watts9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationABMechanical1360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	<b>Electrical</b>		
3Power Output @ 1dB Comp.180 Watts min4Small Signal Gain+56 dB min5Gain Flatness± 2.0 dB max6IP3+58 dBm typical7Input VSWR2:1 max8Harmonics-20 dBc typical @ 180 Watts9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input Power4000 Watts max12AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationABMechanicalConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	1	Frequency Range	20 – 1000 MHz
4Small Signal Gain+56 dB min5Gain Flatness± 2.0 dB max6IP3+58 dBm typical7Input VSWR2:1 max8Harmonics-20 dBc typical @ 180 Watts9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input Power4000 Watts max12AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationABMechanicalInputrous Signals31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	2	Saturated Output Power	300 Watts typical
5Gain Flatness $\pm 2.0 dB max$ 6IP3 $\pm 58 dBm typical$ 7Input VSWR $2:1 max$ 8Harmonics $-20 dBc typical @ 180 Watts$ 9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input Power4000 Watts max12AC Input $200 - 240$ VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationAB16Dimensions $31" x 24" x 26"$ 17Weight $360$ lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature $0^{\circ}$ C to $+50^{\circ}$ C22Operating Humidity95% Non-condensing	3	Power Output @ 1dB Comp.	180 Watts min
6IP36IP3+58 dBm typical7Input VSWR $2:1 \max$ 8Harmonics-20 dBc typical @ 180 Watts9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input Power4000 Watts max12AC Input $200 - 240$ VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationAB16Dimensions $31" x 24" x 26"$ 17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	4	Small Signal Gain	+56 dB min
7Input VSWR2:1 max8Harmonics-20 dBc typical @ 180 Watts9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input Power4000 Watts max12AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationAB16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	5	Gain Flatness	<u>+</u> 2.0 dB max
8Harmonics-20 dBc typical @ 180 Watts9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input Power4000 Watts max12AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationAB16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	6	IP <sub>3</sub>	+58 dBm typical
9Spurious Signals> -60 dBc typical @ 180 Watts10Input/Output Impedance50 Ohms nominal11AC Input Power4000 Watts max12AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationAB16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	7	Input VSWR	2:1 max
10Input/Output Impedance50 Ohms nominal11AC Input Power4000 Watts max12AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationABMechanicalImpute the signal31" x 24" x 26"16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	8	Harmonics	-20 dBc typical @ 180 Watts
11AC Input Power4000 Watts max12AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationABMechanical16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	9	Spurious Signals	> -60 dBc typical @ 180 Watts
12AC Input200 – 240 VAC, single phase13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationABMechanical16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	10	Input/Output Impedance	50 Ohms nominal
13RF Input0 dBm max14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationABMechanical16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	11	AC Input Power	4000 Watts max
14RF Input Signal FormatCW/AM/FM/PM/Pulse15Class of OperationABMechanical16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	12	AC Input	200 – 240 VAC, single phase
15Class of OperationABMechanical16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	13	RF Input	0 dBm max
MechanicalImage: Second se	14	RF Input Signal Format	CW/AM/FM/PM/Pulse
16Dimensions31" x 24" x 26"17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced AirEnvironmental0perating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	15	Class of Operation	AB
17Weight360 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced Air21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	<u>Mechanical</u>		
18ConnectorsType-N19GroundingChassis20CoolingInternal Forced AirEnvironmental	16	Dimensions	31" x 24" x 26"
19GroundingChassis20CoolingInternal Forced AirEnvironmental	17	Weight	360 lb. max
20CoolingInternal Forced AirEnvironmental	18	Connectors	Type-N
EnvironmentalOperating Temperature0° C to +50° C21Operating Humidity95% Non-condensing	19	Grounding	Chassis
21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	20	Cooling	Internal Forced Air
22 Operating Humidity 95% Non-condensing	Environmental		
	21	Operating Temperature	0° C to +50° C
22 Operating Altitude Up to 10,000' Above See Level	22	Operating Humidity	95% Non-condensing
23 Operating Allitude Op to 10,000 Above Sea Level	23	Operating Altitude	Up to 10,000' Above Sea Level
24 Shock and Vibration Normal Truck Transport	24	Shock and Vibration	Normal Truck Transport

Specifications subject to change without notice.