

5300 Beethoven Street, Los Angeles, CA 90066 TEL: (310)306-5556 • FAX: (310)821-7413 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 4066

2.4 - 2.5 GHz 300 WATTS LINEAR POWER RF AMPLIFIER

Specification @ 25° C

Solid State Broadband High Power RF Amplifier

The 4066 is a 300 Watt broadband amplifier that covers the 2.4 - 2.5 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide 3rd excellent 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.

Electrical 1 Frequency Range 2.4 – 2.5 GHz 2 Saturated Output Power 300 Watts min 3 Small Signal Gain +56 dB min 4 Small Signal Gain Flatness +/- 1 dB max 5 IP ₃ +60 dBm typical 6 Input VSWR 2:1 max 7 Harmonics -40 dBc minimum 8 Spurious Signals < -60 dBc typical 9 Input/Output Impedance 50 Ohms nominal 10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input Power 2000 Watts max 12 AC Input Power 2000 Watts max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical A/AB 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis <			_
2 Saturated Output Power 300 Watts min 3 Small Signal Gain +56 dB min 4 Small Signal Gain Flatness +/- 1 dB max 5 IP3 +60 dBm typical 6 Input VSWR 2:1 max 7 Harmonics -40 dBc minimum 8 Spurious Signals < -60 dBc typical 9 Input/Output Impedance 50 Ohms nominal 10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input Power 2000 Watts max 13 RF Input 180 - 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/PM/PUIse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air </th <th><u>Electrical</u></th> <th></th> <th></th>	<u>Electrical</u>		
Small Signal Gain	1	Frequency Range	2.4 – 2.5 GHz
4 Small Signal Gain Flatness +/- 1 dB max 5 IP ₃ +60 dBm typical 6 Input VSWR 2:1 max 7 Harmonics -40 dBc minimum 8 Spurious Signals < -60 dBc typical 9 Input/Output Impedance 50 Ohms nominal 10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input 180 – 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	2	Saturated Output Power	300 Watts min
5 IP ₃ +60 dBm typical 6 Input VSWR 2:1 max 7 Harmonics -40 dBc minimum 8 Spurious Signals < -60 dBc typical 9 Input/Output Impedance 50 Ohms nominal 10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input 180 – 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	3	Small Signal Gain	+56 dB min
6 Input VSWR 2:1 max 7 Harmonics -40 dBc minimum 8 Spurious Signals < -60 dBc typical 9 Input/Output Impedance 50 Ohms nominal 10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input 180 – 264 VAC, single phase 13 RF Input Hout Holdsmax 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical A/AB 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	4	Small Signal Gain Flatness	+/- 1 dB max
7 Harmonics -40 dBc minimum 8 Spurious Signals < -60 dBc typical 9 Input/Output Impedance 50 Ohms nominal 10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input 180 – 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	5	IP ₃	+60 dBm typical
8 Spurious Signals < -60 dBc typical 9 Input/Output Impedance 50 Ohms nominal 10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input 180 – 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	6	Input VSWR	2:1 max
9 Input/Output Impedance 50 Ohms nominal 10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input 180 – 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	7	Harmonics	-40 dBc minimum
10 VSWR Protection Protected by Isolator 11 AC Input Power 2000 Watts max 12 AC Input 180 – 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical A/AB 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	8	Spurious Signals	< -60 dBc typical
11 AC Input Power 2000 Watts max 12 AC Input 180 – 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	9	Input/Output Impedance	50 Ohms nominal
12 AC Input 180 – 264 VAC, single phase 13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	10	VSWR Protection	Protected by Isolator
13 RF Input +10 dBm max 14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	11	AC Input Power	2000 Watts max
14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	12	AC Input	180 – 264 VAC, single phase
15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	13	RF Input	+10 dBm max
MechanicalDimensions19" x 7" x 26"17Weight100 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced AirEnvironmental21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing	14	RF Input Signal Format	CW/AM/FM/PM/Pulse
16 Dimensions 19" x 7" x 26" 17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	15	Class of Operation	A/AB
17 Weight 100 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	Mechanical		
18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	16	Dimensions	19" x 7" x 26"
19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	17	Weight	100 lb. max
20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	18	Connectors	Type-N
Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	19	Grounding	Chassis
21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing	20	Cooling	Internal Forced Air
22 Operating Humidity 95% Non-condensing	<u>Environmental</u>		
	21	Operating Temperature	0° C to +50° C
	22	Operating Humidity	95% Non-condensing
Operating Altitude Up 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

Parameter

CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Voltage and Current
- ♦ Over power protection
- ♦ VSWR protection

CIRCUIT CONTROL

- ♦ Standby
- ♦ Gain Control, 20dB range
- ♦ ALC control

ORDERING MODELS

- ♦ RE Rear Panel model with Ethernet, RS232, and IEEE Interface
- ♦ FE Front Panel model with Ethernet, RS232, and IEEE Interface

CIRCUIT INDICATIONS

- ♦ Forward and Reflected power indication
- ♦ Gain Control, % selection
- ♦ Web browser interface (Ethernet)

Specifications subject to change without notice

Approved By:	Date: