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MODEL 5282

0.8 - 2.0 GHz 200 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5282 is a 200 Watt broadband amplifier that covers the 0.8 - 2.0 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. Like all OPHIR_{RF} amplifiers, the 5282 comes with an extended multiyear warranty.

Electrical 1 Frequency Range 0.8 – 2.0 GHz 2 Saturated Output Power 200 Watts typical 3 Power Output @ 1dB Comp. 125 Watts min 4 Small Signal Gain +54 dB min 5 Small Signal Gain Flatness ± 2.0 dB max 6 IP3 +61 dBm typical 7 Input VSWR 2:1 max 8 Harmonics -20 dBc typical @ 125 Watts 9 Spurious Signals < -60 dBc typical @ 125 Watts 10 Input/Output Impedance 50 Ohms nominal 11 AC Input Power 1000 Watts max 12 AC Input 100 – 240 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 19" x 5.25" x 20" 17 Weight 50 lb. max 18 Connectors Type-N 19 Grounding Chassis 20 Cooling Internal Force		<u>Parameter</u>	Specification @ 25° C
2 Saturated Output Power 3 Power Output @ 1dB Comp. 4 Small Signal Gain 5 Small Signal Gain Flatness 6 IP3 +61 dBm typical 7 Input VSWR 2:1 max 8 Harmonics -20 dBc typical @ 125 Watts 9 Spurious Signals <-60 dBc typical @ 125 Watts 10 Input/Output Impedance 50 Ohms nominal 11 AC Input Power 1000 Watts max 12 AC Input 100 - 240 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 5.25" x 20" 17 Weight 50 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 Altitude Up to 10,000' Above Sea Level	Electrical		
3	1	Frequency Range	0.8 – 2.0 GHz
4 Small Signal Gain +54 dB min 5 Small Signal Gain Flatness ± 2.0 dB max 6 IP3 +61 dBm typical 7 Input VSWR 2:1 max 8 Harmonics -20 dBc typical @ 125 Watts 9 Spurious Signals < -60 dBc typical @ 125 Watts 10 Input/Output Impedance 50 Ohms nominal 11 AC Input Power 1000 Watts max 12 AC Input 100 - 240 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 Internal Forced Air 16 Dimensions 19" x 5.25" x 20" 17 Weight 50 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 Altitude Up to 10,00	2	Saturated Output Power	200 Watts typical
5 Small Signal Gain Flatness ± 2.0 dB max 6 IP3 +61 dBm typical 7 Input VSWR 2:1 max 8 Harmonics -20 dBc typical @ 125 Watts 9 Spurious Signals < -60 dBc typical @ 125 Watts 10 Input/Output Impedance 50 Ohms nominal 11 AC Input Power 1000 Watts max 12 AC Input 100 – 240 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 19" x 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	3	Power Output @ 1dB Comp.	125 Watts min
6 IP ₃ +61 dBm typical 7 Input VSWR 2:1 max 8 Harmonics -20 dBc typical @ 125 Watts 9 Spurious Signals < -60 dBc typical @ 125 Watts 10 Input/Output Impedance 50 Ohms nominal 11 AC Input Power 1000 Watts max 12 AC Input 100 – 240 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 19" x 5.25" x 20" 17 Weight 50 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 Altitude Up to 10,000' Above Sea Level	4	Small Signal Gain	+54 dB min
7 Input VSWR 2:1 max 8 Harmonics -20 dBc typical @ 125 Watts 9 Spurious Signals < -60 dBc typical @ 125 Watts 10 Input/Output Impedance 50 Ohms nominal 11 AC Input Power 1000 Watts max 12 AC Input 100 – 240 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 19" x 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	5	Small Signal Gain Flatness	<u>+</u> 2.0 dB max
Spurious Signals -20 dBc typical @ 125 Watts	6	IP ₃	+61 dBm typical
9 Spurious Signals < -60 dBc typical @ 125 Watts 10 Input/Output Impedance 50 Ohms nominal 11 AC Input Power 1000 Watts max 12 AC Input 100 – 240 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 5.25" x 20" 17 Weight 50 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 Altitude Up to 10,000' Above Sea Level	7	Input VSWR	2:1 max
10 Input/Output Impedance 50 Ohms nominal 11 AC Input Power 1000 Watts max 12 AC Input 100 – 240 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 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	8	Harmonics	-20 dBc typical @ 125 Watts
11 AC Input Power 1000 Watts max 12 AC Input 100 – 240 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 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	9	Spurious Signals	< -60 dBc typical @ 125 Watts
12 AC Input 100 – 240 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 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	10	Input/Output Impedance	50 Ohms nominal
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 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	11	AC Input Power	1000 Watts max
14 RF Input Signal Format CW/AM/FM/PM/Pulse 15 Class of Operation A/AB Mechanical 16 Dimensions 19" x 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	12	AC Input	100 – 240 VAC, single phase
Mechanical A/AB 16 Dimensions 19" x 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	13	RF Input	+10 dBm max
MechanicalDimensions19" x 5.25" x 20"17Weight50 lb. max18ConnectorsType-N19GroundingChassis20CoolingInternal Forced AirEnvironmental21Operating Temperature0° C to +50° C22Operating Humidity95% Non-condensing23Operating AltitudeUp to 10,000' Above Sea Level	14	RF Input Signal Format	CW/AM/FM/PM/Pulse
16 Dimensions 19" x 5.25" x 20" 17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	15	Class of Operation	A/AB
17 Weight 50 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 23 Operating Altitude Up to 10,000' Above Sea Level	<u>Mechanical</u>		
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 23 Operating Altitude Up to 10,000' Above Sea Level	16	Dimensions	19" x 5.25" x 20"
19 Grounding Chassis 20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing 23 Operating Altitude Up to 10,000' Above Sea Level	17	Weight	50 lb. max
20 Cooling Internal Forced Air Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing 23 Operating Altitude Up to 10,000' Above Sea Level	18	Connectors	Type-N
Environmental 21 Operating Temperature 0° C to +50° C 22 Operating Humidity 95% Non-condensing 23 Operating Altitude Up to 10,000' Above Sea Level	19	Grounding	Chassis
Operating Temperature 0° C to +50° C Operating Humidity 95% Non-condensing Operating Altitude Up to 10,000' Above Sea Level	20	Cooling	Internal Forced Air
Operating Humidity 95% Non-condensing Operating Altitude Up to 10,000' Above Sea Level	<u>Environmental</u>		
Operating Altitude Up to 10,000' Above Sea Level	21	Operating Temperature	0° C to +50° C
	22	Operating Humidity	95% Non-condensing
24 Shock and Vibration Normal Truck Transport	23	Operating Altitude	Up to 10,000' Above Sea Level
_ : Tronical Transfer	24	Shock and Vibration	Normal Truck Transport

Specifications subject to change without notice.

CIRCUIT CONTROL

- ♦ Standby (amplifier disable)
- ♦ Gain/power setting with 25dB range
- ♦ VSWR protection Reset
- ♦ ALC On/ Off

CIRCUIT INDICATIONS CIRCUIT PROTECTIONS

- ♦ Forward Power
- ♦ Reflected power
- ♦ VSWR Fault
- ♦ Temp Fault
- ♦ Gain Setting (VVA) percentage
- ♦ Thermal Overload
- ♦ Over Current
- V Over Current
- ♦ Over Voltage



FE Model Shown

ORDERING MODELS

- ♦ RE R model with Ethernet, IEEE488 and RS232
- ♦ FE F model with Ethernet, IEEE488 and RS232