

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 5283**

2.0- 4.0 GHz 60 WATTS LINEAR POWER RF AMPLIFIER

# Solid State Broadband High Power RF Amplifier

The 5283 is a 60 Watt broadband amplifier that covers the 2000-4000 MHz frequency range. This amplifier utilizes Class A linear power devices that provide an excellent 3<sup>rd</sup> 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 5283 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	<u>Parameter</u>	Specification @ 25° C	
<u>Electrical</u>			
1	Frequency Range	2.0-4.0 GHz	
2	Power at P <sub>SAT</sub>	60 Watts Minimum	
3	Power at P <sub>1dB</sub>	40 Watts Minimum	
4	Small Signal Gain	+49 dB min	
5	Small Signal Gain Flatness	<u>+</u> 2.5 dB max	
6	IP <sub>3</sub>	+56 dBm typical	
7	Input VSWR	2:1 max	
8	Harmonics	-20 dBc typical @ 40 Watts	
9	Spurious Signals	< -60 dBc typical @ 40 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	
<u>Mechanical</u>			
16	Dimensions	19" x 5.25" x 20"	
17	Weight	39 Lbs.	
18	Connectors	Type-N	
19	Grounding	Chassis	
20	Cooling	Internal Forced Air	
<u>Environmental</u>			
21	Operating Temperature	0° C to +50° C	
22	Operating Humidity	95% Non-condensing	
23	Operating Altitude	Up to 10,000' Above Sea Level	
24	Shock and Vibration	Normal Truck Transport	



#### **FE MODEL SHOWN**

#### **ORDERING MODELS**

- RE Rear RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232
- FE Front RF Connector model with Front Panel Controller Ethernet. IEEE-488 and RS232
- R Rear RF Connector model
- F Front RF Connector model

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## FRONT PANEL CONTROLLER FEATURES (Optional)

- Forward Power Monitoring
- Reflected Power Monitoring
- Gain Control (20 dB dynamic range of adjustment)
- ♦ Fault Status
- Full Protection Of any VSWR Condition, Open or Short, into any Phase Angle
- Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports
- Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level
- ♦ Standby/Enable Control
- ♦ Front Panel Display for easy viewing of System Status Locally
- ♦ Keypad buttons for full local control

#### CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ◊ Over Current
- ♦ Over Voltage
- ♦ Open or Short VSWR Conditions (With Front Panel Controller)

# **CIRCUIT CONTROL** (WITH FRONT PANEL CONTROLLER)

- ♦ Standby (amplifier disable)
- Gain/power setting with 20dB range
- ♦ VSWR protection Reset
- O ALC On/ Off

# CIRCUIT INDICATIONS (WITH FRONT PANEL CONTROLLER)

- ♦ Forward Power
- Reflected power

- Gain Setting (VVA) percentage

#### **RFPA SYSTEM OPTIONS**

- Switched Filter Bank
- Input Power Requirements
- ♦ Ruggedized Version
- ♦ Cabinet Requirements
- ♦ Outdoor Version
- ♦ Sample Ports
- ♦ Racking Options
- ♦ Many More!
- ♦ Consult Factory with Specific Requirements





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