



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 5294
700 - 6000 MHz
100 WATTS
RF POWER AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5294 is a very high power broadband amplifier that covers the 700 – 6000 MHz frequency range. This amplifier utilizes Class A linear power devices that provide an excellent 3rd order intercept point, high gain, a wide dynamic range, and an industry leading P1dB performance.

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 5294 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<u>Electrical</u>		
1	Frequency Range	700-6000 MHz
2	Power at P _{SAT}	100 Watts Minimum
3	Power at P _{1dB}	60 Watts Typical 50 Watts Minimum
4	Small Signal Gain	+53 dB Minimum
5	Power Flatness (Pin 0 dBm)	± 4.0 dB Maximum
6	IP ₃	+54 dBm Typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ P1dB
9	Spurious Signals	< -60 dBc typical @ P1dB
10	Input/Output Impedance	50 Ohms Nominal
11	AC Input Power	2,400 Watts Maximum
12	AC Input	100 – 240 VAC, single phase
13	RF Input	0 dBm nominal +3 dBm max without damage
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A
<u>Mechanical</u>		
16	Dimensions (3U)	19" x 5.25" x 27"
17	Weight	71 Lbs.
18	RF 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



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<u>Front Panel Controller</u>	<u>Parameter</u> (Optional, "E" feature)
25	Forward Power Monitoring (dBm or Watts)
26	Reflected Power Monitoring (dBm or Watts)
27	Gain Control (25 dB dynamic range of adjustment)
28	Fault Status
29	Full Protection Of any VSWR Condition, Open or Short, any Phase.
30	Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports
31	Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level
32	Standby/Enable Control
33	Front Panel Display for easy viewing of System Status Locally
34	Keypad buttons for full local control
<u>Circuit Protections</u>	
35	Thermal Overload
36	Over Current
37	Over Voltage
38	Open or Short VSWR Conditions
<u>Circuit Control</u> (With front panel controller, "E" option)	
40	Standby (amplifier disable)
41	Gain/power setting with 25 dB range
42	VSWR protection Reset
43	ALC On/ Off
<u>Circuit Indications</u> (With front panel controller, "E" option)	
44	Forward Power
45	Reflected power
46	VSWR Fault
47	Temp Fault
48	Gain Setting (VVA) percentage

Specifications subject to change without notice

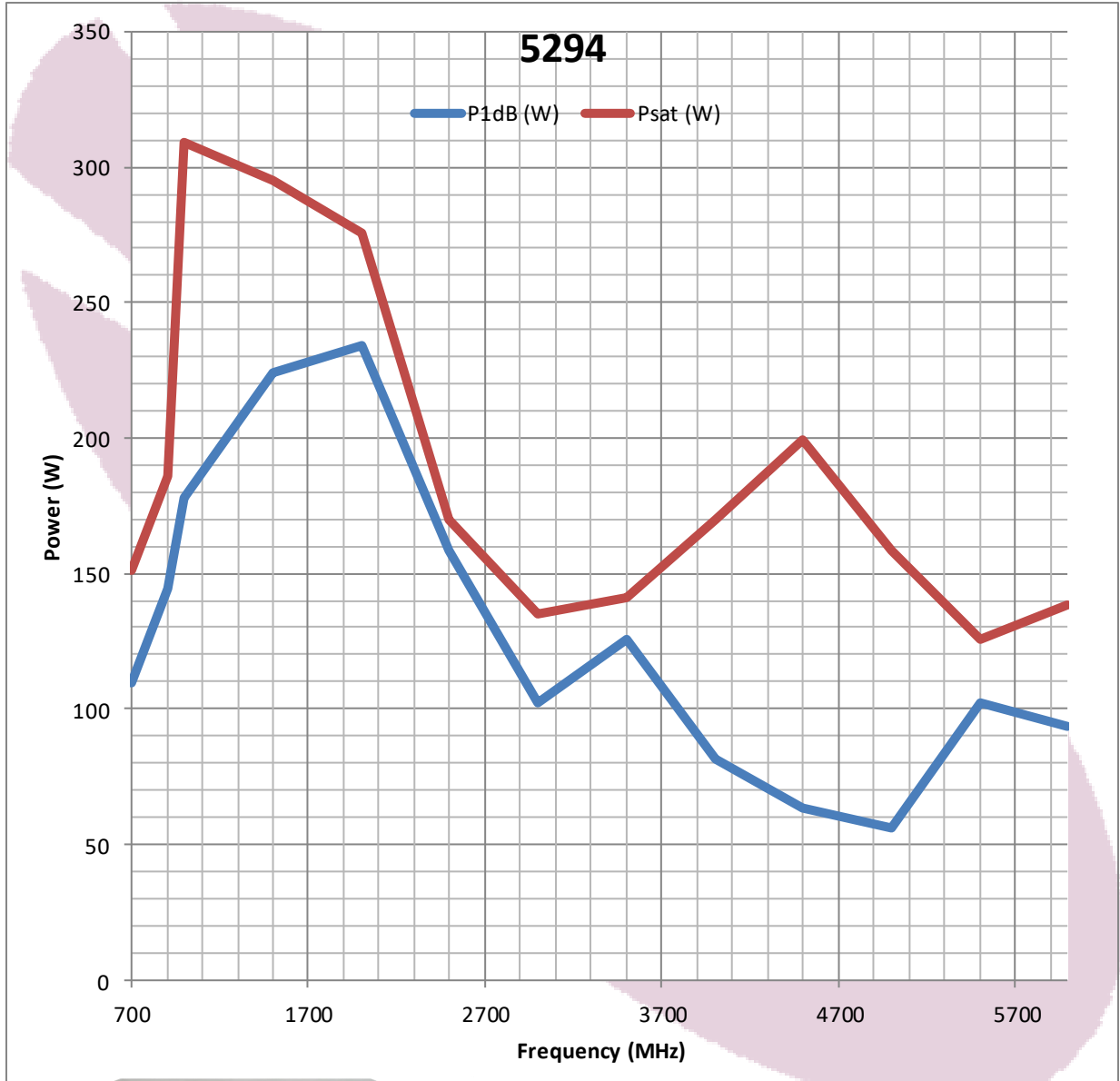


07/19 Approved By: _____ Date: _____



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FE VERSION 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



MADE IN USA

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Date: _____