

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 5303102**

450 - 1000 MHz 100 WATTS LINEAR POWER RF AMPLIFIER

# Solid State Broadband High Power RF Amplifier

The 5303102 is a 100 Watt broadband amplifier that covers the 450 – 1000 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB 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 with operation proven reliability.

Specifications subject to change without notice

	<u>Parameter</u>	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	450 – 1000 MHz
2	Saturated Output Power	100 Watts min
3	Small Signal Gain	+51dB min
4	Gain Flatness	+/- 1.5dB max
5	IP <sub>3</sub>	+56 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical @ 100 Watts
8	Spurious Signals	< -60 dBc typical @ 100 Watts
9	Input/Output Impedance	50 Ohms nominal
10	DC Input Current	300W maximum
11	DC Input	18 to 36 VDC nominal
12	Blanking - TTL	"High": un-blanked "Low": Blanked
13	Blanking Speed	1mS
14	Temperature indication	LM35 equivalent
15	Open/Short mismatch	Protected against open and short at Pout = 100W
<u>Mechanical</u>		
16	Dimensions	7" x 6" x 1"
17	Weight	2.1 Lbs.
18	Connectors	SMA female for RF input and output Feed through for 28V, DC Return, Blanking and Temperature Monitor
19	Grounding	Chassis
20	Cooling	Adequate Heatsink Required
<u>Environmental</u>		
21	Baseplate 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

#### **OPTIONS**

♦ Heatsink and Fans Available

#### SPECIAL FEATURES

- ♦ TTL Blanking
- ♦ Full VSWR Protection
- ♦ Wide Voltage Operation 18-36V
- ♦ Temperature Reporting

09/12	Approved By:	Date:



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