



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 5303148**  
**20 - 1000 MHz**  
**50 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High  
 Power RF Amplifier**

The 5303148 is a 50 Watt broadband amplifier that covers the 20 – 1000 MHz frequency range. This small and lightweight 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.

	Parameter	Specification @ 25° C
<b>Electrical</b>		
1	Frequency Range	20 – 1000 MHz
2	Saturated Output Power	50 Watts minimum
3	Power Output @ 1dB Comp.	30 Watts minimum
4	Small Signal Gain	+48 dB minimum
5	Power Gain Flatness	± 2.0 dB maximum
6	IP <sub>3</sub>	+51 dBm typical
7	Input VSWR	2:1 maximum
8	Harmonics	-15 dBc minimum @ 30 Watts -20 dBc typical @ 30 Watts
9	Spurious Signals	≤ -60 dBc @ 30 Watts
10	Input/Output Impedance	50 Ohms nominal
11	DC Input Current	15 Amps maximum
12	DC Input	+28 Vdc nominal
13	RF Input	0 dBm nominal <b>+3 dbm maximum</b>
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A
16	Blanking Feature	3-5 Vdc = un-blanked (on) <0.5 Vdc = blanked (off)
17	Blanking Speed:	Rise and Fall time: ≤5µs
<b>Mechanical</b>		
	Dimensions	6" x 3" x 1.1"
	Weight	2 lbs.
18	Connectors	SMA female
19	Grounding	Chassis
20	Cooling	Adequate Heatsink Required
<b>Environmental</b>		
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



**Heatsink and Fans, 5803148 assembly shown**

Specifications subject to change without notice.