

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 5803132-027

700-2700 MHz 100 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5803132-027 is a 100 Watt broadband amplifier that covers the 700-2700 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3rd 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 5803132-027 comes with an extended multiyear warranty.

DC and Interface Connector Pin Description

♦ Pin 1: VDD +30VDC
♦ Pin 2: VDD +30VDC

♦ Pin 3: Ground
♦ Pin 4: N/C

♦ Pin 5: Current Monitor

♦ Pin 6 - 8: N/C

♦ Pin 9: VDD +30VDC

♦ Pin 10: Ground
♦ Pin 11: Ground

♦ Pin 12: Blanking (On/Off)

On = TTL High Off = TTL Low ♦ Pin 13: Ground

The second	<u>Parameter</u>	Specification @ 25° C
Electrical		
1	Frequency Range	700-2700 MHz
2	Output Power @ PSAT	90 Watts minimum 100 Watts typical
3	Small Signal Gain	+45 dB minimum
4	Gain Flatness @ PSAT	+/-2.0 dB maximum +/-1.5 dB typical
5	Input VSWR	2:1 max
6	Harmonics	-20 dBc typical -15 dBc maximum
7	Spurious Signals	-60 dBc maximum -70 dB typical
8	Input/Output Impedance	50 Ohms nominal
10	Efficiency (PAE)	25% minimum 35% typical
11	Switching Time (Blanking)	5uSec maximum
12	DC Input	30Vdc nominal (RF module) 24-30 Vdc (fans, terminal block)
13	RF Input	+10 dBm max
14	DC Power Consumption	500 W max
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	A/AB
<u>Mechanical</u>		
17	Dimensions	10.75" x 7.0" x 3.75"
18	Weight	9.5 lbs.
19	Connectors	SMA female
20	Grounding	Chassis
21	Cooling	Adequate Heatsink Required
Environmental		
22	Baseplate Temperature	-20° C to +85° C
23	Operating Humidity	95% Non-condensing
24	Operating Altitude	Up to 10,000' Above Sea Level
25	Shock and Vibration	Standard truck transportation

Specifications subject to change without notice



Representation of actual module assembly.

40140	4 1.75	D 4
12/12	Approved By:	Date: