

Solid State Broadband High Power RF Amplifier

The 5303132-027 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 5303132-027 comes with an extended multiyear warranty.



Shown with Optional Heatsink and Fans

	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	700 - 2700 MHz
2	Output Power @ Psat	100 Watts typical 90 Watts minimum
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 30% typical
11	Switching Time (Blanking)	5µs maximum
12	DC Input	30Vdc nominal
13	RF Input	+10 dBm max +7 dBm nominal full rated power
14	DC Power Consumption	500 W max
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	A/AB
Mechanical		
17	Dimensions	Length 180mm Width 105mm Height <30mm
18	Weight	< 1.0Kg
19	Connectors	SMA female
20	Grounding	Chassis
21	Cooling	Adequate Heatsink Required
Environmental		
22	Baseplate Temperature	-20° C to +85° C Shutdown over 85°C Recovery @ 60°C
23	Operating Humidity	95% Non-condensing
24	Operating Altitude	Up to 10,000' Above Sea Level
25	Shock and Vibration	MIL-STD-810F (Method 516.5)

Specifications subject to change without notice

DC and Interface Connector Pin Description

- | | |
|-------------------------|--|
| ◇ Pin 1 VDD +30VDC | ◇ Pin 8 N/C |
| ◇ Pin 2 VDD +30VDC | ◇ Pin 9 VDD +30VDC |
| ◇ Pin 3 Ground | ◇ Pin 10 Ground |
| ◇ Pin 4 N/C | ◇ Pin 11 Ground |
| ◇ Pin 5 Current Monitor | ◇ Pin 12 Blanking (On/Off)
On = 3-5 Vdc; Off = <0.5 Vdc |
| ◇ Pin 6 N/C | ◇ Pin 13 Ground |
| ◇ Pin 7 N/C | |

Blanking sequence: Apply main Vdc first, before enabling blanking feature.