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MODEL 5303132-004

1800-2000 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5303132-004 is a 100 Watt broadband amplifier that covers the 1800-2000 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 5303132-004 comes with an extended multiyear warranty.

DC and Interface Connector Pin Description

◇ Pin 1 VSWR ALARM

- Normal TTL Low
- Alarm TTL High

◇ Pin 2 Current Monitor

◇ Pin 3 Temperature Monitor

◇ Pin 4 Mute (On/Off Switching)

◇ Pin 5 VDD +30 VDC

◇ Pin 6 VDD +30VDC

◇ Pin 7 VDD +30VDC

◇ Pin 8 Ground

◇ Pin 9 Ground

◇ Pin 10 Ground

	Parameter	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	1800-2000 MHz
2	Output Power @ PSAT	100 Watts minimum
3	Small Signal Gain	+51 dB minimum
4	Gain Flatness @ PSAT	+/-2.0 dB maximum +/-1.5 dB typical
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical -15 dBc maximum
8	Spurious Signals	-60 dBc maximum
10	Input/Output Impedance	50 Ohms nominal
11	Efficiency (PAE)	25% minimum 35% typical
12	Switching Time (Blanking) Enable TTL Low	5uSec maximum
13	DC Input	30VDC nominal
14	RF Input	+10 dBm max
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	A/AB
<u>Mechanical</u>		
17	Dimensions	Length 180mm Width 105mm Height <30mm
18	Weight	< 1.0Kg
19	Connectors	SMA female
20	Grounding	Chassis
21	Cooling	Adequate Heatsink Required
<u>Environmental</u>		
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)