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## MODEL 5303133-001

**20 - 1000 MHz**  
**100 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5303133-001 is a 100 Watt broadband amplifier that covers the 20 – 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 operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5303133-001 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
<b><u>Electrical</u></b>		
1	Frequency Range	20 – 1000 MHz
2	Saturated Output Power*	100 Watts typical
3	P1dB Output Power*	40 Watts Minimum
4	Small Signal Gain	+50 dB min
5	Gain Flatness	± 2.5 dB max
6	IP <sub>3</sub>	+54 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical
9	Spurious Signals	< -60 dBc typical
10	Input/Output Impedance	50 Ohms nominal
11	VSWR Tolerance	Will withstand 15:1 VSWR Conditions
12	DC Input Current	15 Amps max
13	DC Input	24-32 VDC
14	RF Input	+0 dBm nominal for rated power
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	A/AB
<b><u>Mechanical</u></b>		
17	Dimensions	9.5" x 6.0" x 1.4"
18	Weight	5 Lbs.
19	Connectors	SMA female
20	Grounding	Chassis
21	Cooling	Adequate Heatsink Required
<b><u>Environmental</u></b>		
22	Operating Temperature	0° C to +50° C
23	Operating Humidity	95% Non-condensing
24	Operating Altitude	Up to 10,000' Above Sea Level
25	Shock and Vibration	Normal Truck Transport

Specifications subject to change without notice.

\* = 32VDC input

### AVAILABLE OPTIONS

- ◇ - Add Heatsink Only
- ◇ - Add Heatsink and Fans
- ◇ - Externally mounted DC-DC Converter
- ◇ - Many other options available. Consult factory!

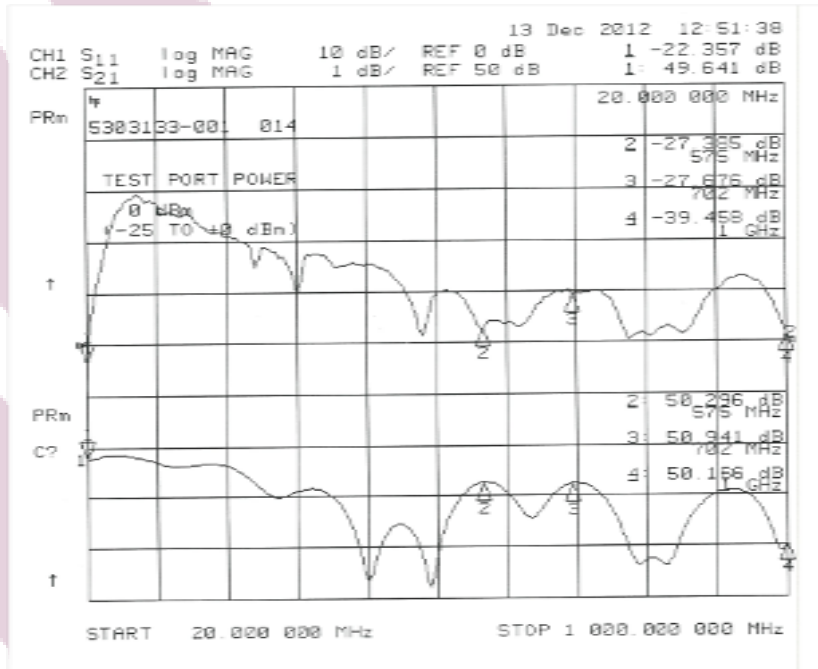




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### SAMPLE P<sub>SAT</sub> TEST PLOT

- ◇ Input Level to RFA is 0dBm
- ◇ Output Gain at 0dBm is 50dBm
- ◇ Output Power at PSAT is 100 Watts minimum
- ◇ Lower end of frequency band is 150 Watts

