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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 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 5303133-001 comes with an extended multiyear warranty.



	<u>Parameter</u>	<u>Specification @ 25° C</u>
<u>Electrical</u>		
1	Frequency Range	20 – 1000 MHz
2	Saturated Output Power*	100 Watts Minimum
3	P1dB Output Power*	40 Watts Minimum
4	Small Signal Gain	+50 dB min
5	Gain Flatness	± 2.5 dB max
6	IP ₃	+54 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 80W Pout
9	Spurious Signals	< -60 dBc typical @ 80W Pout
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	Enable/Disable	3-5 Vdc = Enable <0.5 Vdc = Disable
15	RF Input	0 dBm nominal for rated power +3 dBm Maximum
16	RF Input Signal Format	CW/AM/FM/PM/Pulse
17	Class of Operation	A/AB
<u>Mechanical</u>		
18	Dimensions	9.5" x 6.0" x 1.4"
19	Weight	5 Lbs.
20	Connectors	RF in: SMA female RF out: N-type female
21	Grounding	Chassis
22	Cooling	Adequate Heatsink Required
<u>Environmental</u>		
23	Operating Temperature	0° C to +50° C
24	Operating Humidity	95% Non-condensing
25	Operating Altitude	Up to 10,000' Above Sea Level
	Shock and Vibration	Normal Truck Transport

Specifications subject to change without notice.

* = 32 Vdc input

AVAILABLE OPTIONS:

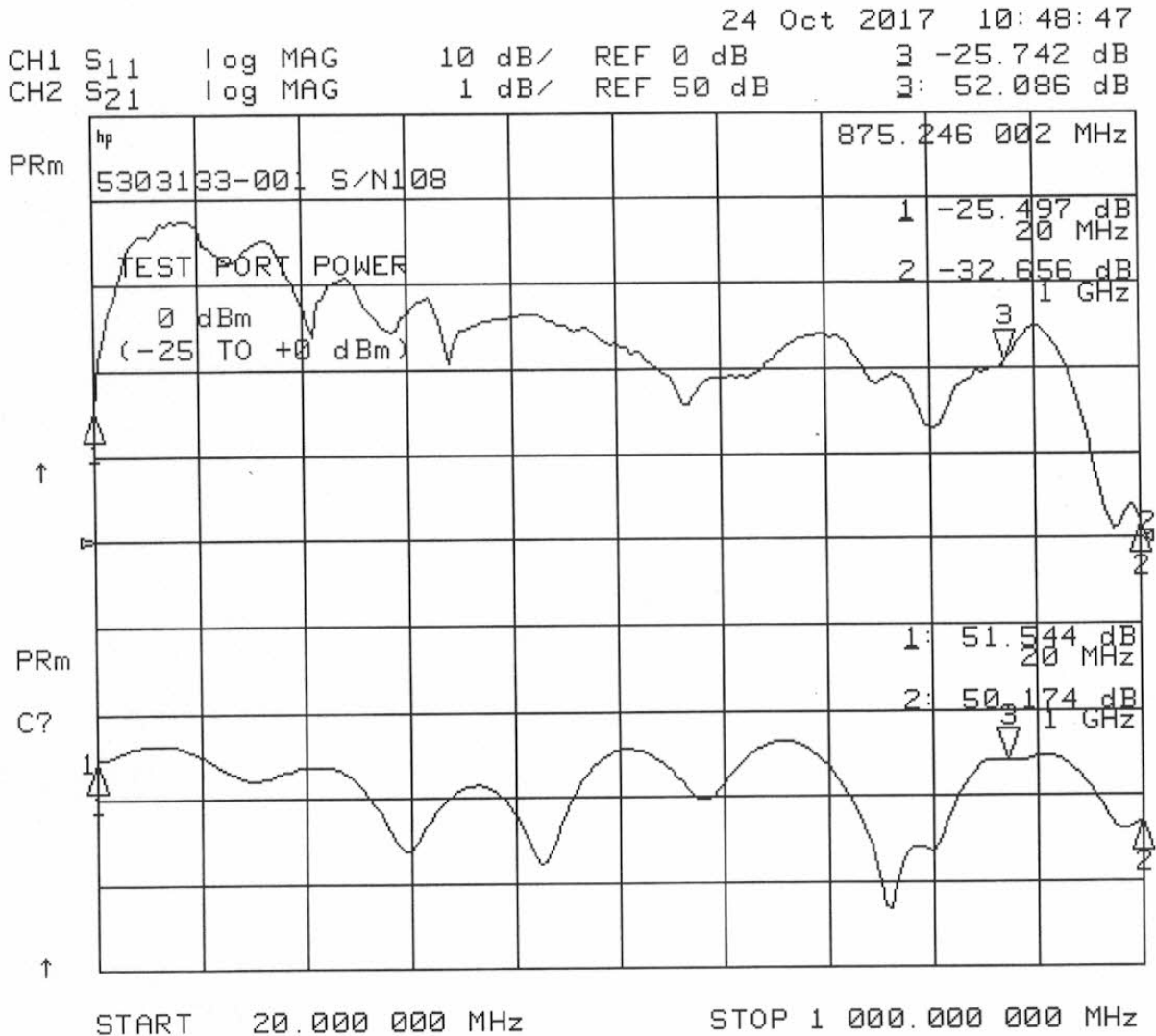
- ◇ - Add Heatsink Only (5903133-001)
- ◇ - Add Heatsink and Fans (5803133-001)
- ◇ - Externally mounted DC-DC Converter
- ◇ - Many other options available. Consult factory!



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SAMPLE PSAT TEST PLOT

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

