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**MODEL 5303021A**  
**500 - 1000 MHz**  
**20 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High  
 Power RF Amplifier**

The 5303021A is a 20 Watt broadband amplifier that covers the 500 – 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 5303021A comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
<b><u>Electrical</u></b>		
1	Frequency Range	500 – 1000 MHz
2	Saturated Output Power	20 Watts typical
3	Power Output @ 1dB Comp.	13 Watts min
4	Small Signal Gain	+44 dB min
5	Gain Flatness	± 1.5 dB max
6	IP <sub>3</sub>	+47 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 13 Watts
9	Spurious Signals	> -60 dBc typical @ 13 Watts
10	Input/Output Impedance	50 Ohms nominal
11	DC Input Current	4 Amps max
12	DC Input	28 VDC nominal
13	RF Input	0 dBm
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	AB
<b><u>Mechanical</u></b>		
16	Dimensions	6" x 3" x 1.1"
17	Weight	2 lb. max
18	Connectors	SMA female
19	Grounding	Chassis
20	Cooling	Adequate Heatsink Required
<b><u>Environmental</u></b>		
21	Baseplate Temperature	0° C to +50° C
22	Operating Humidity	95% Non-condensing
23	Operating Altitude	Up to 10,000' Above Sea Level
24	Shock and Vibration	Normal Truck Transport <small>Specifications subject to change without notice.</small>



Approved By: \_\_\_\_\_ Date: \_\_\_\_\_