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## MODEL 5813012A-001

**1 - 2.17 GHz**  
**12 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### **Solid State Broadband High Power RF Amplifier**

The 5813012A-001 is a 12 Watt broadband amplifier that covers the 1 – 2.17 GHz 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 5813012A-001 comes with an extended

	Parameter	Specification @ 25° C
<b>Electrical</b>		
1	Frequency Range	1 – 2.17 GHz
2	Saturated Output Power	12 Watts typical @ 1.0 to 2.17GHz 7 Watts typical @ 0.8 to 1GHz
3	Power Output @ 1dB Comp.	10 Watts typical @ 1.0 to 2.17GHz 5 Watts typical @ 0.8 to 1GHz
4	Small Signal Gain	+39 dB min
5	Gain Flatness	± 1.5 dB max
6	IP <sub>3</sub>	+50 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 10 Watts
9	Spurious Signals	> -60 dBc typical @ 10 Watts
10	Input/Output Impedance	50 Ohms nominal
11	DC Input Current	5.5 Amps max
12	DC Input	13 VDC nominal
13	RF Input	+10 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB
<b>Mechanical</b>		
16	Dimensions	6.8" x 2.7" x 1.0"
17	Weight	2 lb. max
18	Connectors	SMA female
19	Grounding	Chassis
<b>Environmental</b>		
20	Baseplate Temperature	0° C to +50° C
21	Operating Humidity	95% Non-condensing
22	Operating Altitude	Up to 10,000' Above Sea Level
23	Shock and Vibration	Normal Truck Transport

Specifications subject to change without notice.

### **INCLUDED FEATURES**

- ◇ Mounted on a Heat Sink with fans