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## MODEL 5303012A-800

**0.8 - 2.0 GHz**  
**12 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### **Solid State Broadband High Power RF Amplifier** Includes Temperature Monitor Output Pin

The 5303012A-800 is a 12 Watt broadband amplifier that covers the 0.8 – 2.0 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 5303012A-800 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
<b><u>Electrical</u></b>		
1	Frequency Range	0.8 – 2.0 GHz
2	Saturated Output Power	12 Watts typical
3	Power Output @ 1dB Comp.	10 Watts min
4	Small Signal Gain	+41 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 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
16	Temperature Indication	LM35 1V/10°C
<b><u>Mechanical</u></b>		
17	Dimensions	6.8" x 2.7" x 1.0"
18	Weight	2 lb. max
19	Connectors	SMA female
20	Grounding	Chassis
21	Cooling	Adequate Heatsink Required
<b><u>Environmental</u></b>		
22	Baseplate 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.

