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## **MODEL 5302019**

2.3 - 2.5 GHz 50 WATTS LINEAR POWER RF AMPLIFIER

## Solid State Band-specific High Power RF Amplifier

The 5302019 is a 50 Watt band-specifc amplifier that covers the 2.3 – 2.5 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, 5302019 the comes with an extended multiyear warranty.

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	<u>Parameter</u>	Specification @ 25° C	
Electrical			
1	Frequency Range	2.3 – 2.5 GHz	
2	Instantaneous Bandwidth	100 MHz	
3	Saturated Output Power	50 Watts typical	
4	Power Output @ 1dB Comp.	40 Watts min	
5	Small Signal Gain	+48 dB min	
6	Gain Flatness	<u>+</u> 0.75 dB max	
7	IP <sub>3</sub>	+56 dBm typical	
8	Input VSWR	2:1 max	
9	Harmonics	-20 dBc typical @ 40 Watts	
10	Spurious Signals	< -60 dBc typical @ 40 Watts	
11	Input/Output Impedance	50 Ohms nominal	
12	DC Input Current	12 Amps max	
13	DC Input	13 VDC nominal	
14	RF Input	+10 dBm max	
15	RF Input Signal Format	CW/AM/FM/PM/Pulse	
16	Class of Operation	A/AB	
<u>Mechanical</u>			
17	Dimensions	6.6" x 4.0" x 1.1"	
18	Weight	4 lb. max	
19	Connectors	SMA female	
20	Grounding	Chassis	
21	Cooling	Adequate Heatsink Required	
<b>Environmental</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

## **Output Protection:**

Can operate into a full Open or Short, without damage, due to the use of an Internal Circulator and Load.

Approved By:	Date	e: