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MODEL 5181-001

3.0 - 3.6 GHz 20 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5181-001 is a 20 Watt broadband amplifier that covers the 3.0 - 3.6 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide 3rd excellent an 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 5181-001 comes with an extended multiyear warranty.

CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current

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- ♦ R Rear Panel Connectors
- ♦ F Front Panel Connectors
- ♦ RE R model w/Control Option
- ♦ FE F model w/Control Option

	<u>Parameter</u>	Specification @ 25° C	
Electrical			
1	Frequency Range	3.0– 3.6 GHz	
2	Saturated Output Power	20 Watts typical	
3	Power Output @ 1dB Comp.	15 Watts min	
4	Small Signal Gain	+44 dB min	
5	Gain Flatness @ 20 Watts	<u>+</u> 0.5 dB from 3.1 – 3.5 GHz <u>+</u> 0.75 dB from 3.0 – 3.6 GHz	
6	IP ₃	+52 dBm typical	
7	Input VSWR	2:1 max	
8	Harmonics	-20 dBc typical @ 15 Watts	
9	Spurious Signals @ 15 W	-60 dBc from 150 Hz – 300 KHz -70 dBc from 300 KHz – 7 MHz	
10	Input/Output Impedance	50 Ohms nominal	
11	AC Input Power	200 Watts max	
12	AC Input	100 – 240 VAC, single phase	
13	RF Input	+10 dBm max	
14	RF Input Signal Format	CW/AM/FM/PM/Pulse	
15	Class of Operation	A/AB	
<u>Mechanical</u>			
16	Dimensions	19" x 5.25" x 20"	
17	Weight	30 lb. max	
18	Connectors	Type-N	
19	Grounding	Chassis	
20	Cooling	Internal Forced Air	
Environmental			
21	Operating 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	

Specifications subject to change without notice.



02/12 Approved By: ______ Date: _____