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**MODEL 5046**  
**1.0 - 2.0 GHz**  
**1.2 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5046 is a 1.2 Watt broadband amplifier that covers the 1.0 – 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 5046 comes with an extended multiyear warranty.

#### CIRCUIT PROTECTIONS

- ◇ Infinite Load VSWR
- ◇ RF Input Overdrive
- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage

#### AVAILABLE OPTIONS

- ◇ LCD Digital Display
- ◇ IEEE-488 GPIB
- ◇ Gain Adjustment
- ◇ Automatic Level Control
- ◇ Extended Temperature Range
- ◇ Rear Panel Connectors
- ◇ Rack Mounting Slide
- ◇ Different Case Styles

	Parameter	Specification
<b>Electrical</b>		
1	Frequency Range	1.0 – 2.0 GHz
2	Saturated Output Power	1.2 Watts typical
3	Power Output @ 1dB Comp.	1.0 Watts min
4	Small Signal Gain	+30 dB min
5	Small Signal Gain Flatness	± 1.5 dB max
6	IP <sub>3</sub>	+40 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 1 dB comp.
9	Spurious Signals	> -60 dBc
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	20 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input Overdrive	+10 dB over 1 dB Compression
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB Linear
<b>Mechanical</b>		
16	Dimensions	19" x 3.5" x 18"
17	Weight	20 lb. max
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<b>Environmental</b>		
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

