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MODEL 4059-001

1.71 - 1.88 GHz
120 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Band-specific High Power RF Amplifier

The 4059-001 is a 120 Watt broadband amplifier that covers the 1.71 – 1.88 GHz frequency range. This small and lightweight amplifier utilizes Class A linear power devices that provide an excellent 3rd 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 4059-001 comes with a standard one year warranty.

	Parameter	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	1.71 – 1.88 GHz
2	Saturated Output Power	120 Watts typical
3	Power Output @ 1dB Comp.	100 Watts min
4	Small Signal Gain	+51 dB min
5	Small Signal Gain Flatness	± 0.75 dB max
6	IP ₃	+60 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 100 Watts
9	Spurious Signals	< -60 dBc typical @ 100 Watts
10	AC Input	100 – 240 VAC, single phase
11	RF Input	+10 dBm max
12	RF Input Signal Format	CW/FM/PM
13	Class of Operation	A
<u>Mechanical</u>		
14	Dimensions	19" x 5.25" x 22.3"
15	Weight	45 lb. max
16	Connectors	Type-N
17	Grounding	Chassis
18	Cooling	Internal Forced Air
<u>Environmental</u>		
19	Operating Temperature *	0° C to +50° C
20	Operating Humidity	95% Non-condensing
21	Operating Altitude	Up to 10,000' Above Sea Level
22	Shock and Vibration	Normal Truck Transport

* Temperature Testing, 8 Cycles, RF On, ambient air temperature as below:
 Profile: +50° C for 2 hrs, 0.5 hr transition, 0° C for 1 hr, 0.5 hr transition.

Complete Temperature Cycling Time: 35 hours

Failure Criteria used after completing 8 Temperature Cycles:
 RF Specifications will be confirmed at ~ 25° C room temperature.

FEATURES

- ◇ Front Panel Meter indicating the RF Power level being delivered to the load
- ◇ RF Open & Short Circuit Protected

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