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MODEL 5170R-900

1.0 - 3.0 GHz 10 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5170R-900 is a 10 Watt broadband amplifier that covers the 1.0 – 3.0 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB 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 with proven operation reliability. Like all OPHIR_{RF} amplifiers, the 5170R-900 comes with an extended multiyear warranty.

	<u>Parameter</u>	Specification @ 25° C	
Electrical			
1	Frequency Range 1.0 – 3.0 GHz		
2	Saturated Output Power	10 Watts typical	
3	Power Output @ 1dB Comp.	7 Watts min	
4	Small Signal Gain +38 dB min		
5	5 Small Signal Gain Flatness <u>+</u> 1.5 dB max		
6	IP ₃ +48 dBm typical		
7	Input VSWR 2:1 max		
8	Harmonics -20 dBc typical @ 7 Watts		
9 Spurious Signals < -60 dBc t		< -60 dBc typical @ 7 Watts	
10	Input/Output Impedance 50 Ohms nominal		
11	AC Input Power 200 Watts max		
12	2 AC Input 100 – 240 VAC,		
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	37 Lbs.	
18	Connectors	Type-N	
19	Grounding Chassis		
20	Cooling Internal Forced Air		
<u>Environmental</u>			
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.

CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current
- ♦ Over Voltage
- ♦ Customer Specific Front Panel
- ♦ Front Panel Controller
- ♦ Rear Panel Mounted DB9-Female for External RF Enable / Standby Control

NOTE: Pin 5 is GND, Pin 1 is the Control Line.

- IF Pin 1: OPEN RF Standby Condition (Nominal Gain 30dB min.)
- IF Pin 1: GND RF Enabled (Amplifier in Normal Operation) (< 100mA to Activate)

05/13	Approved By:	Date: