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MODEL 5303024-007

2.3 - 2.7 GHz 10 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5303024-007 is an 8 Watt broadband amplifier that covers the 2.3 – 2.7 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 operation with proven reliability. Like all OPHIR_{RF} amplifiers, the 5303024-007 comes with an extended multiyear warranty.

	<u>Parameter</u>	Specification @ 25° C
Electrical		
1	Frequency Range	2.3 – 2.7 GHz
2	Saturated Output Power	10 Watts typical
3	Power Output @ 1dB Comp.	6 Watts min
4	Small Signal Gain	+39 dB min
5	Gain Flatness	<u>+</u> 0.75 dB max
6	IP ₃	+51 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-30 dBc typical @ 6 Watts
9	Spurious Signals	> -70 dBc typical @ 6 Watts
10	Input/Output Impedance	50 Ohms nominal
11	DC Input Current	2 Amps max
12	DC Input	15 VDC nominal
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	6.8" x 2.7" x 1.0"
17	Weight	2 lb. max
18	Connectors	SMA female
19	Grounding	Chassis
20	Cooling	Adequate Heatsink Required
<u>Environmental</u>		
21	Baseplate Temperature	-40° C to +55° C
22	Operating Humidity	95% Non-condensing
23	Operating Altitude	Up to 10,000' Above Sea Level
24	Shock	IEC 68-2-6
25	Vibration	IEC 68-2-27
26	Storage Temperature	-40° C to +85° C

SPECIAL FEATURES

- _ DB9 Connector for DC Inputs and controls.
- Fast Blanking Speed 5uSec on/off, 25mA standby current maximum



DB9 Pin Out

- 1 Reserved
- 2 RF Sense
- 3 Temperature Sense
- 4 Reserved
- 5 TX Burst
- 6 VDD
- 7 VDD
- 8 GND
- g GND

01/12	Approved By:	Date:
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