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**MODEL 5304007S**  
**2500-6100 MHz**  
**50 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High  
 Power RF Amplifier**

The 5304007S is a 50 Watt broadband amplifier that covers the 2500-6100 MHz frequency range. This small and lightweight amplifier utilizes Class A 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 5304007S comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
<b><u>Electrical</u></b>		
1	Frequency Range	2500-6100 MHz
2	Saturated Output Power	50 Watts Typical 40 Watts Minimum
3	Small Signal Gain	+76 dB min +80 dB Maximum
4	Gain Flatness	+/- 2.0dB max
5	IP <sub>3</sub>	+53dBm
6	IMD @ +18 dBm per Tone, 500 KHz Spacing	-68dBc
7	VSWR (50Ω Nominal) Input Output	1.8:1 Max 2.2:1 Max
8	Harmonics	-20 dBc typical
9	Spurious Signals	< 70 dBc typical
10	Noise Figure	4.5 dB Max
11	Input/Output Impedance	50 Ohms nominal
12	DC Input Current	10.0A Max
13	DC Input	24 VDC nominal
14	RF Input	-27dBm Nominal for rated power
15	RF Input	+13dBm Max
<b><u>Mechanical</u></b>		
16	Dimensions	7.0" x 5.0" x 1.1"
17	Weight	2 lb. max
18	Connectors	SMA female RF In / Out DB9 DC and Control
19	Grounding	Chassis
20	Cooling	Adequate Heatsink Required
<b><u>Environmental</u></b>		
21	Baseplate 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	MIL-STD-810F

Specifications subject to change without notice.

**DSUB 9 PIN OUT**

- 1 NC
- 2 I Sense (0 to 2.5VDC)
- 3 Temp Sense (0 to 1.0VDC)
- 4 NC
- 5 S/D (TTL, Active Low)
- 6 +24VDC
- 7 +24VDC
- 8 GND
- 9 GND