MODEL 5304005S

30 - 500 MHz
50 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5304005S is a 50 Watt broadband amplifier that covers the 30 – 500 MHz 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 5304005S comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	30 – 500 MHz
2	Saturated Output Power	50 Watts Typical 45 Watts Minimum
3	Small Signal Gain	+76 dB min +80 dB Maximum
4	Gain Flatness	+/- 1.75dB max
5	IP$_3$	+53dBm
6	IMDA +19 dBm per Tone, 100KHz Spacing	-70dBc
7	VSWR (50Ω Nominal) Input Output	1.8:1 Max 2.0:1 Max
8	Harmonics	-20 dBc typical
9	Spurious Signals	< 70 dBc typical
10	Noise Figure	<10.0 dB
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
Mechanical		
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
Environmental		
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

05/10   Approved By: _____   Date: _____