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MODEL 5304024-002

20-1000 MHz
80 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5304024-002 is a 80 Watt broadband amplifier that covers the 20-1000 MHz 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.

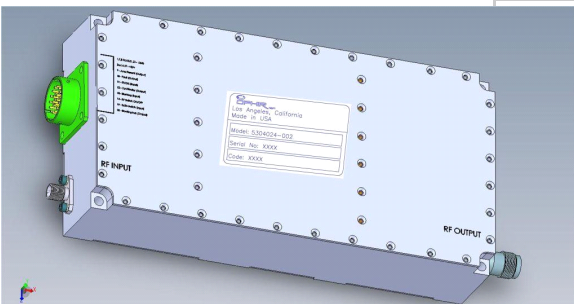
Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability. Like all OPHIR_{RF} amplifiers, the 5304024-002 comes with an extended multiyear warranty.

Specifications subject to change without notice

	Parameter	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	20-1000 MHz
2	Output Power CW (P _{SAT})	80 Watts Min
3	Gain at rated output Power	+50 dB min
4	Gain Flatness	+/-3.0 dB max +/-0.5 in any 30MHz Span
5	Input VSWR	2:1 max @ all phase angles
6	Linearity, Third Order Inter-modulation Suppression	-25 dBc Max 2 tones; 6dB below rated power 1MHz Separation
7	Harmonics: In Band Out of Band	-15dBc Max -60dBc Max
8	Spurious Signals	-60dBc Max
9	Noise Figure	< 12 dB
10	Input/Output Impedance	50 Ohms nominal
11	DC Input	18-36V (Operational) 0-36V (Without Damage)
12	RF Input	+10 dBm max (No Damage)
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	A/AB
<u>Mechanical</u>		
15	Dimensions (Excluding Connectors)	3.4" W x 6.4" L x 2.5" H
16	Weight	2.0 lb. max
17	Connectors DC & Control Connector	(RF Input) SMA female (RF Output) N female or TNC (Please specify at time of order) Military Grade Circular Connector.
18	Grounding	Chassis
19	Cooling	Adequate Heatsink Required
<u>Environmental</u>		
20	Baseplate Temperature	-25° C to +85° C (Fully Operational) -25° C to +90° C (No Damage)
21	Operating Humidity	95% Non-condensing
22	Operating Altitude	Up to 10,000' Above Sea Level Up to 40,000' Non Operational
23	Shock	MIL-STD-810F (Method 516.5) Proc I
24	Vibration	MIL-STD-810F (Method 514.5) Category V (Loose Cargo)

DC Blanking

- ◇ Blanked: TTL Low <0.8V
- ◇ Enable: TTL High >2.75V or Open
- ◇ 5V Maximum on Blanking Line
- ◇ Rise/Fall Time < 5uSec



DC POWER FEATURES

- ◇ DC Input 18-36VDC
- ◇ 0-34V Input; No Damage
- ◇ 240 Watts Maximum Power Consumption
- ◇ 6 Watts Power Consumption when Blanked



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MODEL 5304024

150-1000 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER

Interface Connector	Mil-Std 38999 Male Connector	MS27499E12B35P ITT/CANNON
PIN #	DESCRIPTION	SPECIFICATIONS
2,3,4,5,6,16,17	VDD	+28VDC
1,7,8,15,18,21,22	GND	GROUND
9	Amplifier Present Indication	TTL High (Logic 1)
10	Amplifier Fault Indication	Amplifier Operational (Logic 0) Amplifier Fault (Logic 1)
11	Amplifier Enable/Disable Command	TTL (Input) Enable (Logic 1) Disable (Logic 0) Fault Reset (Logic 0, then Logic 1)
12	Amplifier OPR/STBY Indicator	Operate (Logic 1) Standby (Logic 0)
13	Amplifier Blanking Command	TTL (Input) Amplifier Enable (Logic 1) Amplifier Blank (Logic 0)
14,19	No Connection	
20	Amplifier Blanking Indicator	Amplifier Transmitting (Logic 1) Amplifier Blanked (Logic 0)