



5300 Beethoven Street, Los Angeles, CA 90066
 TEL: (310)306-5556 • FAX: (310)821-7413
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MODEL 5304023

800-3000 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5304023 is a 100 Watt broadband amplifier that covers the 800-3000 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.

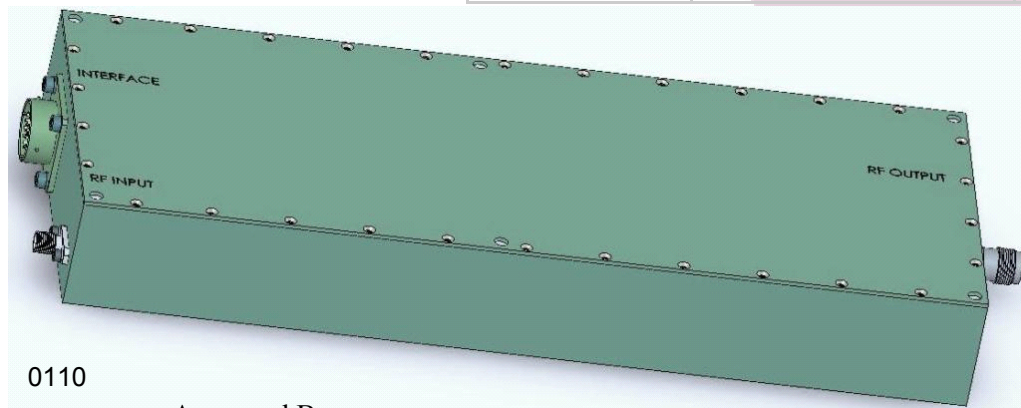
Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability. Like all OPHIR_{RF} amplifiers, the 5304023 comes with an extended multiyear warranty.

Specifications subject to change without notice

	Parameter	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	800-3000 MHz
2	Output Power CW (P _{SAT})	100 Watts Min
3	Output Power CW (P _{1dB})	60 Watts Min
4	Small Signal Gain	+51 dB min
5	Gain Flatness	± 2.5 dB max
6	IP ₃	+54 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-25 dBc typical
9	Spurious Signals	< -60 dBc typical
10	Noise Figure	< 10 dB
11	Input/Output Impedance	50 Ohms nominal
12	DC Input	28 VDC nominal
13	RF Input	+0 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB
<u>Mechanical</u>		
16	Dimensions	3.4" x 6.9" x 1.5"
17	Weight	2.0 lb. max
18	Connectors	(RF Input) SMA female (RF Output) N female ITT, Cannon Series II # MS27499E12B35P
19	Grounding	Chassis
20	Cooling	Adequate Heatsink Required
<u>Environmental</u>		
21	Baseplate Temperature	-40° C to +85° C
22	Operating Humidity	95% Non-condensing
23	Operating Altitude	Up to 40,000' Above Sea Level
24	Shock and Vibration	MIL-STD-810F (Method 516.5)

DC Blanking

◇ Rise/Fall Time < 5uSec



0110

Approved By: _____

Date: _____



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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)

