



5300 Beethoven Street, Los Angeles, CA 90066
 TEL: (310)306-5556 • FAX: (310)821-7413
 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 5303178
20-520 MHz
50 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5303178 is a 50 Watt broadband amplifier that covers the 20-520 MHz frequency range. This small and lightweight amplifier utilizes latest generation 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 5303178 comes backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25°C & 36Vdc			Unit of Measure
		Minimum	Nominal	Maximum	
Electrical					
1	Frequency Range	20		520	MHz
2	Output Power P _{SAT}	40	50		Watts
3	Output Power P _{1dB}	30			Watts
4	Small Signal Gain	47			dB
5	Small Signal Flatness			± 1.5	dB
6	Gain Flatness (P _{SAT})			± 1.0	dB
7	IP ₃		51		dBm
8	Input VSWR	2:1			Ratio
9	Harmonics @ 30 Watts	-15	-20		dBc
10	Spurious @ 30 Watts		-60		dBc
11	Input/Output Impedance		50		Ohms
12	DC Input Current @ 50W		4	5	Amps
13	DC Input	24*	36	42	Vdc
14	RF Input for Rated Power		0	+3	dBm
15	Blanking (Rise/Fall)		2.5	5	µSec
16	DC Blanking logic	<0.5 Vdc = blanked (off); Open or 3.5-5Vdc = un-blanked (on)			
17	RF Input Signal Format	CW/AM/FM/PM/Pulse			
18	Class of Operation	A/AB			
Mechanical					
19	Dimensions (L x W x H)	6" x 3" x 1.1"			
20	Weight		2.0		Lbs.
21	RF Input Connector	SMA female			
22	RF output Connector	SMA Female			
23	Grounding	Chassis			
24	Cooling	Adequate Heatsink and Air flow Required			
Environmental					
25	Operating Temperature Baseplate	0		50	°C
26	Operating Humidity, Non Condensing			95	%
27	Operating Altitude			10,000	Feet above sea level
28	MIL-STD 810G Shock and Vibration	Shock Method 514.5 Vibration Method 516.5			

Specifications subject to change without notice.

*A reduction in performance at lower Vdc input



12/24 Approved By: _____ Date: _____



5300 Beethoven Street, Los Angeles, CA 90066
TEL: (310)306-5556 • FAX: (310)821-7413
WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 5303178
20-520 MHz
50 WATTS
LINEAR POWER RF AMPLIFIER



12/24 Approved By: _____ Date: _____