

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

## Solid State Broadband High Power RF Amplifier

The 5804043-020 is a 50 Watt broadband amplifier that covers the 2.0 - 6.0 GHz 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 with proven operation reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5804043-020 comes with an extended multiyear warranty.



Representation of actual module assembly.

## 580 Features:

Heatsink and Fans Included

MODEL 5804043-020

2.0 - 6.0 GHz 50 WATTS LINEAR POWER RF AMPLIFIER

E	lectrical	Parameter Parameter	Specification @ 25° C
1	1	Frequency Range	2.0 - 6.0 GHz
	2	Saturated Output Power	50 Watts min
	3	Pout at 1 dB compression	25 Watts min
	4	Small Signal Gain	+50 dB min
	5	Small gain flatness Power gain flatness	<u>+</u> 3.0 dB max <u>+</u> 2.0 dB max
	6	IP <sub>3</sub>	50 dBm typical
	7	Input VSWR	2:1 max
	8	Harmonics	-20 dBc typical @ 30 Watts
	9	Spurious Signals	< -60 dBc typical @ 30 Watts
	10	Input/Output Impedance	50 Ohms nominal
	11	DC Input Current	11 Amps max
	12	DC Input	+24 Vdc nominal +26 Vdc maximum
	13	RF Input	+3 dBm max 0 dBm nominal for full rated power
	14	RF Input Signal Format	CW/AM/FM/PM/Pulse
	15	Class of Operation	А
<u>Mechanical</u>			
	17	Dimensions	10" x 4.5" x 9.7"
	18	Weight	12 Lbs.
	19	RF connectors	SMA female
	20	DC input connector	D-sub, 9-pin, female
	21	Grounding	Chassis
22		Cooling	Adequate heatsink and airflow included
Environmental			
	23	Baseplate Temperature	0° C to +50° C
	24	Operating Humidity	95% Non-condensing
	25	Operating Altitude	Up to 20,000' Above Sea Level
	26	Shock and Vibration	Normal truck transportation
		Canal Canadia	na subject to shonge without notice

Specifications subject to change without notice

## D-sub, 9 pin-out:

Pin 1: No connection Pin 2: Current sense (Analog Vdc-output) Pin 3: Thermal sense (Analog Vdc-output) Pin 4: Blanking; 3-5 Vdc = on; <0.5 Vdc = off Pin 5: Shutdown; 3-5 Vdc = on; open or <0.5 Vdc = off Pin 6, 7: +24 Vdc (input) Pin 8, 9: Ground