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MODEL 5304043

2.5 - 6.0 GHz 50 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5304043 is a 50 Watt broadband amplifier that covers the 2.5 - 6.0 GHz 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.

1	Electrical	Parameter Specification @ 25° C				
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 ± 3.0 dB max 6 IP3 50 dBm typical 7 Input VSWR 2:1 max 8 Harmonics -20 dBc typical 9 Spurious Signals < -60 dBc typical 10 Input/Output Impedance 50 Ohms nominal 11 DC Input Current 10 Amps max 12 DC Input +24 Vdc nominal +26 Vdc maximum +3 dBm max 0 dBm nominal for full rated power 0 dBm nominal for full rated power 14 RF Input Signal Format CW/AM/FM/PM/PUlse 15 Class of Operation A Mechanical T'' x 5"' x 1.1" 17 Dimensions 7" x 5"' x 1.1" 18 Weight 2 lbs. 19 RF connectors SMA female 20 DC input connector D-sub, 9-pin, female						
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4 Small Signal Gain +50 dB min 5 Small gain flatness Power gain flatness Power gain flatness Power gain flatness 6 IP₃ 50 dBm typical 7 Input VSWR 2:1 max 8 Harmonics -20 dBc typical 9 Spurious Signals <-60 dBc typical 10 Input/Output Impedance 50 Ohms nominal 11 DC Input Current 10 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 A Mechanical 17 Dimensions 7" x 5" x 1.1" 18 Weight 2 Ibs. 19 RF connectors SMA female 20 DC input connector D-sub, 9-pin, female 21 Grounding Chassis 22 Cooling Adequate heatsink and airflow required 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		·				
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22 Cooling Adequate heatsink and airflow required 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	20	DC input connector	D-sub, 9-pin, female			
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23 Baseplate Temperature 0° C to +50° C 24 Operating Humidity 95% Non-condensing 25 Operating Altitude Up to 20,000' Above Sea Level	22	Cooling				
24 Operating Humidity 95% Non-condensing 25 Operating Altitude Up to 20,000' Above Sea Level	<u>Environmental</u>					
25 Operating Altitude Up to 20,000' Above Sea Level	23	Baseplate Temperature	0° C to +50° C			
	24	Operating Humidity	95% Non-condensing			
26 Shock and Vibration MIL-STD-810F	25	Operating Altitude	Up to 20,000' Above Sea Level			
	26	Shock and Vibration	MIL-STD-810F			

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

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Approved By:	Date: