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MODEL 530308x

5.4 – 5.9 GHz
2000 WATTS
PULSED POWER RF AMPLIFIER

Solid State Pulsed High Power RF Amplifier

The 5303083 is a 2000 Watt band-specific pulsed amplifier that covers the 5.4 – 5.9 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB pulsed power devices that provide an excellent efficiency, high gain, superb pulse fidelity, and a wide frequency range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability.

	Parameter	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	5.4 – 5.9 GHz
3	Peak Output Power	2000 Watts minimum
4	Pulse Width	7us maximum
5	Duty Cycle	10% maximum
6	Power Gain	+14 dB min
7	Gating pulse	500nS prior and post RF pulse
8	Input/Output VSWR	2:1 max
9	Harmonics	-40 dBc
10	Spurious Signals	> -70 dBc
11	Phase Stability	65dB
12	Pulse Droop	0.25dB max
13	Efficiency	40% typical
14	DC Input Voltage	50 VDC Primary voltage +/-5V Auxiliary voltages
15	RF Input Signal Format	Pulse
16	Class of Operation	A/AB
<u>Indications</u>		
17	Analog Temperature	0.7V equals to 35°C
18	Temp fault	"High" is fault
19	Over current fault	"High" is fault
20	Under voltage fault	"High" is fault
21	Forward Detected voltage	0 to 2.5V
22	Reflected Detected voltage	0 to 2.5V
<u>Control</u>		
23	TTL Gating	"Low" is transmit "High" is blanked
24	TTL Remote shutdown	"High" is transmit "Low" - shut down
25	Fault Reset	Toggle remote shut down
<u>Protection</u>		
26	Temperature Protection	Above 70°C
27	VSWR Protection	Isolator
28	Over current, under voltage	Toggle remote shut down



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	<u>Parameter</u>	<u>Specification @ 25° C</u>
<u>Mechanical</u>		
29	Dimensions	Outline drawing below
30	Weight	10 lb. max
31	Connectors	SMA female input TNC female Output 25 pins D-sub connectors
32	Grounding	Chassis
33	Cooling	Cold plate is included Forced air is required with minimum 100 CFM with plenum
<u>Environmental</u>		
34	Operating Temperature	-20° C to +50° C
35	Operating Humidity	95% Non-condensing
36	Operating Altitude	Up to 10,000' Above Sea Level
37	Shock and Vibration	Normal Truck Transport