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## MODEL 5303096-003

**1700-2200 MHz**  
**100 WATTS**  
**POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5303096-003 is a 100 Watt broadband amplifier that covers the 1700 – 2200 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent efficiency, 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.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<b><u>Electrical</u></b>		
1	Frequency Range	1700-2200 MHz
2	Saturated Output Power	100 Watts minimum
3	Small Signal Gain	+50 dB min
4	Power Gain Flatness	± 1 dB max
5	Input VSWR	2:1 max
6	Load VSWR handling	Up to 3:1 Must be protected externally for higher VSWR
7	Harmonics	-20 dBc typical
8	Spurious Signals	> -60 dBc typical
9	Remote shut down	5V to Enable 0V to Disable
10	Blanking	TTL "High" is Enable TTL "Low" is blanked
11	Blanking speed	5uS max. On/Off, Off/On
12	DC Consumption	270W max for Pout of 100W
13	DC Input Voltage	48V
14	RF Input drive required For a rated power	0dBm minimum
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	A/AB
<b><u>Mechanical</u></b>		
17	Dimensions	6.0" x 5.0" x 1.0"
18	Weight	3 lb. max
19	Connectors	SMA female for RF Feed Thru for DC
20	Grounding	Chassis
21	Cooling	Adequate Heatsink Required
<b><u>Environmental</u></b>		
22	Base plate Temperature	-10° C to +60° C
23	Operating Humidity	95% Non-condensing
24	Operating Altitude	Up to 10,000' Above Sea Level
25	Shock and Vibration	MIL-STD-810F