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MODEL 5303114
1000 - 2200 MHz
100 WATTS
HIGH POWER RF AMPLIFIER

**Solid State
 Broadband High
 Power RF Amplifier**

The 5303114 is a 100 Watt broadband amplifier that covers the 1000 – 2200 MHz frequency range. This small and lightweight amplifier utilizes 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.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<u>Electrical</u>		
1	Frequency Range	1000 – 2200 MHz
2	Output power @ Psat	100 Watts min over temp 150 Watts max over temp
3	Small Signal Gain	+53 dB min
4	Small Signal Gain Flatness	+/-1.5dB max
5	Input Return loss	-10dB max
6	Harmonics @ Psat	-15 dBc max @ 2nd -25 dBc max @ 3rd
7	Spurious Signals	-60 dBc max
8	Input/Output Impedance	50 Ohms nominal
9	DC Input Power	10A max
10	DC Input	28 VDC +/- 2V
11	RF Input Power	0 dBm nominal
12	RF Input Signal Format	CW/AM/FM/PM/Pulse
13	Class of Operation	A/AB
14	Interface	D-sub
15	Module Blanking	TTL : 5V for enable 5uS max
16	Phase tracking unit to unit	10 deg max
17	Gain tracking unit to unit	2dB max
18	Temperature Indication	10mV/°C (4V max)
19	Current Indication	100mV/A (4V max)

<u>Mechanical</u>		
20	Dimensions	6" x 4" x 1"
21	Weight	2lb. max
22	Connectors	SMA for RF input TNC for RF output D-sub for control & indications Ground lug for Ground
23	Grounding	Chassis
24	Cooling	Adequate Heatsink Required
<u>Environmental</u>		
25	Sealing	Covers with gaskets Connectors with O-rings
26	Ambient Temperature	-40° C to +85° C
27	Operating Humidity	98% Non-condensing
28	Operating Altitude	Up to 50,000' Above Sea Level
29	Non Operating Altitude	Up to 50,000' Above Sea Level
30	Shock and Vibration	MIL-STD-810F