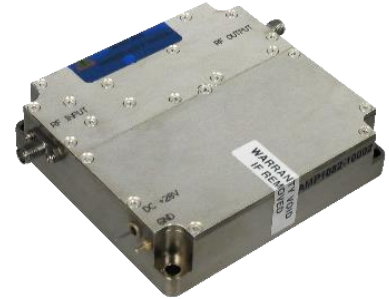


AMP1144 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB GaAs design
Instantaneous ultra wide Bandwidth
Built-in protection circuits
Suitable for all single channel modulation standards
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	4 - 12 GHz	
Power Output Psat	5 Watt Min	
Power Output P1dB GCP	1 Watt Typ	CW
Small Signal Gain	37 dB Min	
Power Gain Flatness	4 dB p-p Max	
Input Return Loss	>10 dB Typ	
Harmonics	-15 dBc Typ	At rated Pout
Noise Figure	10 dB Max	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	22 - 24 VDC Nom	
Current Consumption	1.8 Amp Max / <1.5 Amp Typ	At rated Pout
Max Input Power Protection	+5 dBm Max	0dBm nominal input level
Load VSWR	5 : 1 Max	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +70 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	90 x 85 x 22 mm	Excluding Connectors
Weight	300 gr.	
RF Connectors In/Out	SMA female	Cover Flange
DC Power	Feed Thru	
Cooling	External Heatsink	Forced air required

PIN ASSIGNMENT

Pin	Function	Description
1	DC Voltage	+22 - 24VDC
2	GND	GND



Technical drawing of the PCB layout for the 100W 200V 1000Hz RF power amplifier. The drawing includes three views: a top view, a front view, and a side view.

Top View: Shows the rectangular PCB with dimensions 90mm by 77.4mm. It features an RF INPUT and RF OUTPUT, a DC +22V input, and a GND connection. A note indicates a 4x4 array of holes with a diameter of 4.4mm.

Front View: Shows the PCB with dimensions 85mm by 22mm.

Side View: Shows the PCB with dimensions 15.5mm by 20mm.