

AMP4013 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Small form factor, light weight rack mounted system
 Linear GaAsFET design
 Instantaneous wide bandwidth
 Suitable for all modulations standards
 Built-in control, monitoring, protection and interfacing circuits
 User friendly local and remote interface
 High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	5.9 - 6.4 GHz	
Power Output @ P1dB GCP	200 Watt Min	CW
Power Gain	63 dB Nom	Pin = -10 dBm Typ
Power Gain Flatness	2.0 dB p-p Max	Constant input power
Gain Adjustment Range	20 dB in 0.25 dB steps	
Gain Variation Over Temperature	±1.0 dB	
Input Return Loss	12 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	45dBm/Tone, Δ = 1MHz
AM to PM Conversion	1.0° Typ, 2.5° Max	At rated Pout
Group Delay:		
Linear	±0.03 nS/MHz	
Parabolic	±0.003 nS/MHz ²	
Ripple	1.0 nS p-p	
Noise Figure	8 dB Typ, 15 dB Max	At Max Gain
Phase Noise:		
Offset	dBc/Hz	
100 Hz	-79	
1 KHz	-91	
10 KHz	-105	
100 KHz	-120	
1 MHz	-132	
Harmonics	>40 dBc Typ	At rated output power
Non Harmonics Spurious	>60dBc	
Operating Voltage	180 - 240 VAC	
Power Consumption	1250 Watt Max	At rated Pout
Max Input Power	-2 dBm	Without damage
Load VSWR Protection	∞ : 1	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensing

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MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	430 x 560 x 133.3 mm	3U
Weight	20 kg.	
RF Connectors In / Out	Type-N Female / Waveguide CPR-137G	
AC Power / Interface Connector	IEC 60320-C14 / 9-Pin D-Sub	
Monitor & Control (Digital Control Option): FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	1 Ethernet RJ-45 circular connector TCP/IP 1 RS422/485 D-dub 9S port for redundancy	Remote Bluetooth application
Cooling	Built in Fan Cooling	Variable speed

OUTLINE DRAWING

