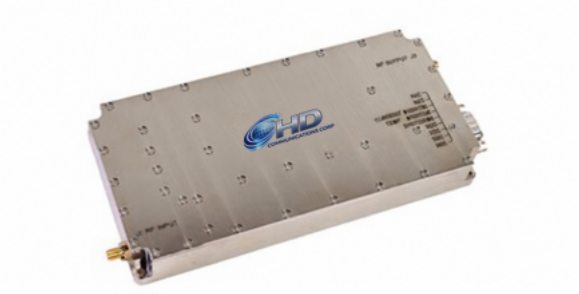
HD33901
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Designed for L-Band narrowband high-power applications
Suitable for all single channel modulations standards
Small form factor, light weight
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1575 ±25 MHz	
Power Output	100 Watt Min	CW
Power Gain	50 dB Min	
Power Gain Flatness	<1.0dB p-p Max	Constant input power
Input / Output VSWR	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	<-30 dBc Typ	40dBm/Tone, Δ = 1MHz
Harmonics	<-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 30 VDC	
Current Consumption	10 Amp Max	At rated Pout
Input Power Protection	+10 dBm Max	<10 Sec without damage
Load VSWR Protection	∞ : 1	<1 minute at rated Pout
Turn On / Off Speed	5 µSec Max	
Module to Module Amplitude	±0.5 dB Max	
Module to Module phase	±6 Deg Max	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions		TBD
Weight		TBD
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "Hi" >3.2V or Open; Disable = TTL "Lo" or Short
6, 7	VDD	28VDC
8, 9	GND	Ground

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Specifications subject to change without notice. Specifications and drawings may vary with selected options.

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