HD30985
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Instantaneous bandwidth
Suitable for linear long pulse applications
Small form factor & light weight
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	4.4 - 5.0 GHz	
Power Output Pulse	100 Watt Min	PW = 5mS, DC = 50%
Small Signal Gain	65 dB Nom	
Power Gain Flatness	4 dB p-p Max	Constant input power
Input Power Level	-50 to 0 dBm	
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	>30 dBc Min	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 VDC Nom	
Current Consumption	10 Amp Avg. / 18 Amp Peak	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	∞ : 1	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	270 x 120 x 27 mm	Excluding Connectors
Weight	TBD	
RF Connectors In/Out/Ref	SMA-F / Type N-F	
DC Power / Interface Connector	9 Pin D-Sub	
Cooling	Built in Heatsink	Forced air required

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MS CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	OPTION 101 - Forward power detect
2	VVA	OPTION 103 - Variable Voltage Attenuator
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL "Hi" = Disable Function @ 50mS (**Option**: 5uS Trigger/Pulse Modulator)
6, 7	VDD	28VDC
8, 9	GND	Ground

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