HD31103
SOLID STATE HIGH POWER AMPLIFIER

PRELIMINARY

FEATURES

Class AB linear LDMOS design
Instantaneous wide bandwidth
Suitable for all modulations standards
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	11.424 GHz	
Power Output Psat	120 Watt Min	CW
Power Gain	50 dB Min	
Input Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	>30 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	48 VDC	
Current Consumption	10 Amp Typ	At rated Pout
Max Input Power	8 dBm	Without damage
Load VSWR Protection	5 : 1	Connect load at all times

ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	500 x 400 x 60mm – or – 350 x 250 x 200mm	Excluding Connectors
Weight	TBD g.	Typical Weight
RF Connectors In/Out	SMA F / Wave Guide	
DC Power / Interface Connector	Hybrid 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 NONITOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1	VDD	48VDC
A2	GND	Ground

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