HD30891
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

High Power Class AB GaN design
X-Band high power applications
Instantaneous Bandwidth
Built-in monitoring and protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	10.5 - 12.75 GHz	
Power Output @ P1dB	40 Watt Typ	11-12.75GHz, 45W Typ
Power Gain	46 dB Min	
Power Gain Flatness	2.0 dB p-p Max	
Input Return Loss	10 dB Min	
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Noise Figure	10 dB Max	
Operating Voltage	32 VDC Nom	
Current Consumption	14 Amp Max	At rated Pout
Max Input Power	+3 dBm Max	Without damage
Load VSWR Protection	5 : 1	At rated output

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	-20 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	WEATHER PROOF HOUSING	
Weight	TBD	
RF Connectors In/Out	Hi Freq. SMA female / WG	
DC Power / Interface Connector	Circular	
Cooling	Internal Fans and Heatsink	

CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1		N/A
2		N/A
3	Current Sensor	I_D@20mV/100mA Typ
4	Temp Sensor	V_T@10mV/°C + 500mV Typ
5	Shutdown	Enable = TTL “Low” or 0V / Disable = TTL “High” (<3.2V)
A1	VDD	32VDC
A2	GND	Ground

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
sales@rfamplifiers.com www.rfamplifiers.com