HD Communications Corp.

HD31893
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Class AB linear GaN design
Ku Band medium pulse power applications
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes
Band	**A**		**B**	
Operating Frequency Range	11.3 - 12 GHz		17 -18 GHz	
Power Output Pulse	10 Watt Min			Pulse
Pulse Characteristics	**Length**	**Duty**		
	5 µS	1 % Nom		
Power Gain	40 dB Min			
Input Return Loss	10 dB Min			Relative to 50 Ohm
Harmonics	-30 dBc Typ			At rated Pout
Spurious	-60 dBc Max			Non-harmonics
Operating Voltage	40 VDC Nom			
Current Consumption	0.3 Amp Avg			At rated Pout
Max Input Power Protection	+3 dBm			Without damage
Load VSWR Protection	∞ : 1			O/P Isolator

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	100 x 100 x 40 mm	Excluding Connectors
Weight	TBD	Typical Weight
RF Connectors In/Out	SMA-F / SMA-F	Waveguide is standard.
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	40VDC
A2	GND	Ground

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