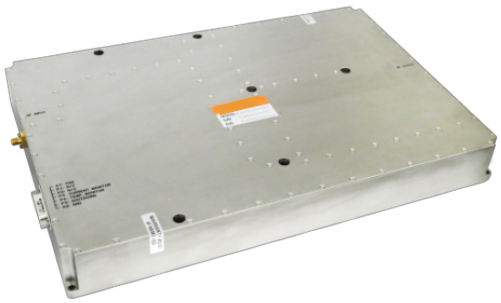
HD Communications Corp.

HD32093 - 5 MODULES SUITE
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Suitable for high power VHF, UHF P, L & S-Bands pulse applications
Built-in protection and monitoring circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS@ 28VDC, 50Ω, 25°C

Parameter	Specification					Notes
System Level Part No.	**HD32093**					
System Specifications	**150 - 3400 MHz, 10 KW Pulse**					
Number of Modules for System Level	8	8	8	16	8	
Model	**HD32093-0.5G-2K**	**HD32093-1G-2K**	**HD32093-1.5G-1.8K**	**HD32093-2.6G-0.8K**	**HD32093-3.4G-1.6K**	
Operating Frequency Range	150 - 500 MHz	400 - 1000 MHz	1.0 - 1.5 GHz	1.5 - 2.6 GHz	2.6 - 3.4 GHz	
Peak Output Power	2 KW	2 KW	1.8 KW	800 W	1.6 KW	With 4% duty-cycle
Power Gain	20 - 30 dB Nom					
Pulse Characteristics	**Width (tp)**	**Duty(δ)**	**Droop**	**Rise/Fall**	**Switch Delay**	
	1 - 25 µS	1 - 4 %	1 dB Max	<75 nS Typ	200 nS Typ	Max rating
Power Gain Flatness	2.0 dB p-p Typ					
Input / Output Return Loss	10 dB Min					Relative to 50 Ohm
Harmonics	-25 dBc Typ					At rated Pout
Spurious	-60 dBc Max					Non-harmonics
Operating Voltage	48 VDC Nom					
Current Consumption Peak/Avg	180A / 8A	180A / 8A	170A / 8A	160A / 7.5A	150A / 7A	δ = 4%, PW 25µS
Maximum Input Power Protection						<10 Sec
Load VSWR	5 : 1					< 1 minute
Pulse Trigger / Modulator Speed	-					

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ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	365 x 250 x 40 mm	Requires ext 10KuF
Weight		
RF Connectors In/Out	SMA female / Type-N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

7-PIN HYBRID PIN ASSIGNMENT

Pin #	Function	Description
A1	VDD	+48VDC
A2	GND	Ground
1	RESERVED	N/A
2	RESERVED	N/A
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	PULSE TRIGGER / MODULATOR	**OPTION:** TTL: Hi = Off, Lo = On @ 1µS

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