HD32309
SOLID STATE HIGH POWER AMPLIFIER

Communications Corp.

FEATURES

Class AB GaN design
Instantaneous full X-Band wide Pulse applications
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes
Operating Frequency Range	8.0 - 12.0 GHz			
Power Output Pulse	100 Watt Min / 120 Watt Typ			33 Watt max Ave Pout
Pulse Characteristics	**Width**	**Duty**	**Rise**	
	0.2 - 20 µS	33 %	10 nS	
Power Gain	50 dB Min			
Power Gain Flatness	3.0 dB p-p Max			Pin=0dBm
Input Return Loss	10 dB Min			
Harmonics	-25 dBc Max			At rated Pout
Spurious	-60 dBc Max			Non-harmonics
Noise Figure	10 dB Max			
Operating Voltage	32 VDC Nom			
Current Consumption	11.5 Amp Max			At rated Pout @ 33%
Max Input Power Protection	+3 dBm Max			<10 Sec without damage
Load VSWR Protection	∞: 1			Output Isolator (Max rating 33W Ave.)
Muting Noise Between Pulses	-30 dBm Max			

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	180 x 200 x 27 mm	Excluding connectors
Weight	4 Kg.	
RF Connectors In/Out	SMA female / Type-N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB 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	TTL
A1	VDD	32VDC

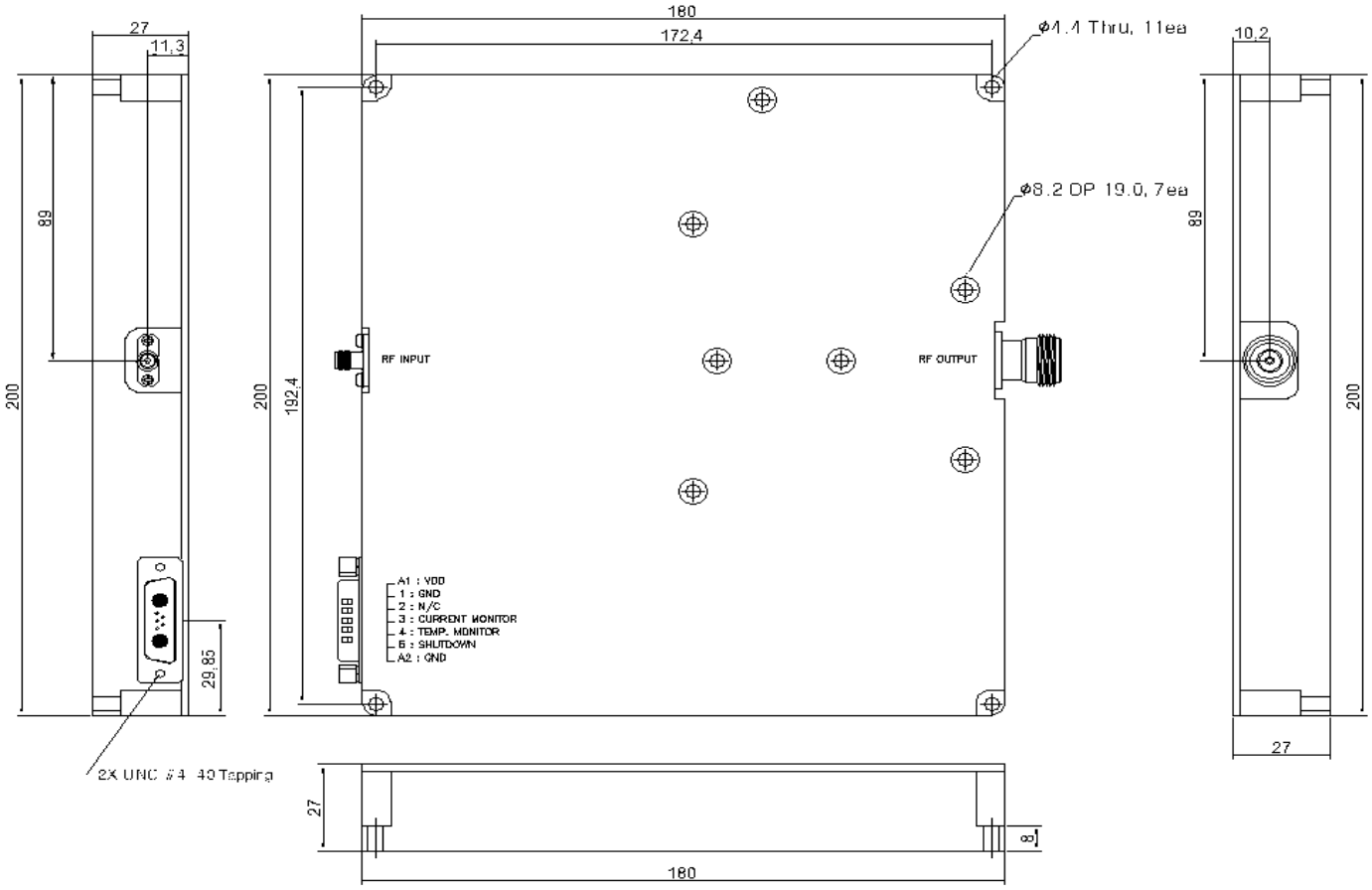
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A2	GND	Ground

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OUTLINE DRAWING



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