HD Communications Corp.

HD30961
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Rack mounted system for easy installation
High power Class AB solid-state devices
Suitable for high duty pulse and composite signals applications
Built-in protection circuits
High efficiency, reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1059 MHz ±25 MHz	
Peak Output Power	1000 Watt Min	Peak Pulse
Power Gain	60 dB Min	
Power Gain Flatness	1 dB p-p Max	
Input /Output Return Loss	14 dB Min	Relative to 50 Ohm
Pulse Envelope Timing	Per Diagram	
Pulse Duty Cycle	30 % Max	
Pulse Repetition Rate	80 KHz	
Pulse Rise / Fall time	200 nS Max	
Harmonics $2^{nd}/3^{rd}$	<-60 dBc	
Spurious	60 dBc Min	Non Harmonics
Operating Voltage	100 -260 VAC, 47 - 63 Hz	Single phase
Power Consumption	4 KWatt Max	At rated Pout
Max Input Power	+10 dBm	Without damage
Load VSWR Protection	10 : 1 Max	
Output Monitoring	-45 dBc Nom	Via BNC-F

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	5U Rack Mount Chassis	See outline drawing
Weight	35 Kg	
RF Connectors In/Out	Type N Female	Rear panel
Cooling	Built in forced air	
Alarm & Monitoring Connector	25 Pin D-Sub	
OPTIONAL: Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485, Optional GPIB Interface	Remote Bluetooth application

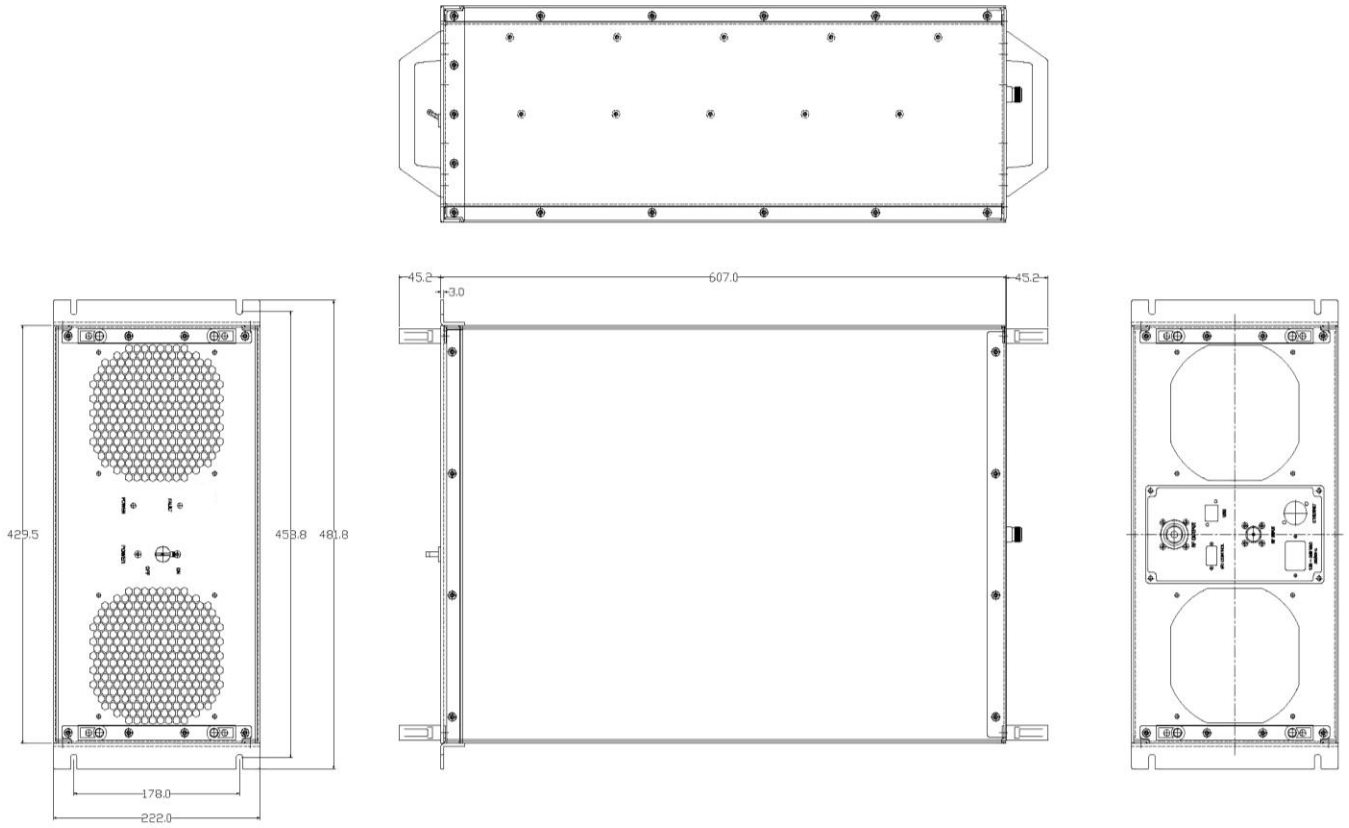
ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50°C	
Storage Temperature	-20 to +70°C	
Relative Humidity	95% @ 40°C	Non Condensing
Shock & Vibrations	MIL STD 810E	

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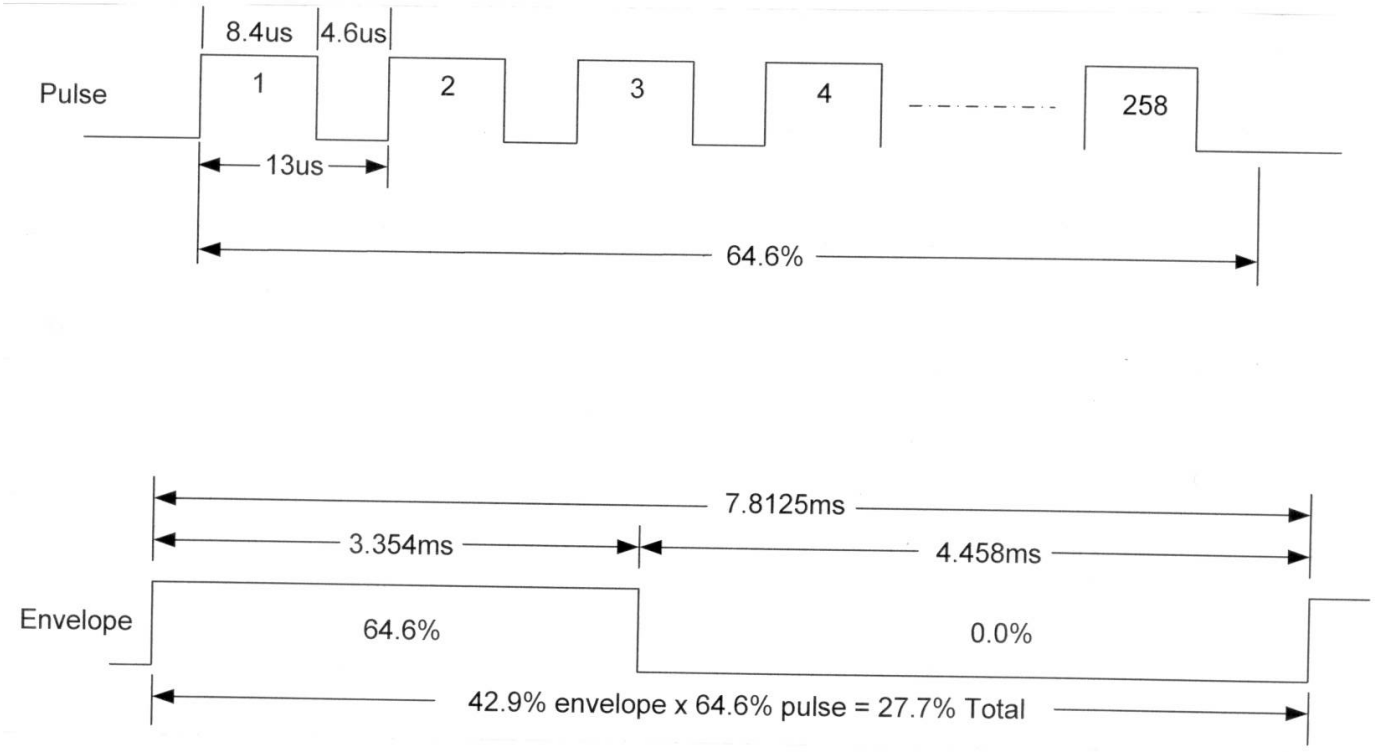
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OUTLINE DRAWING

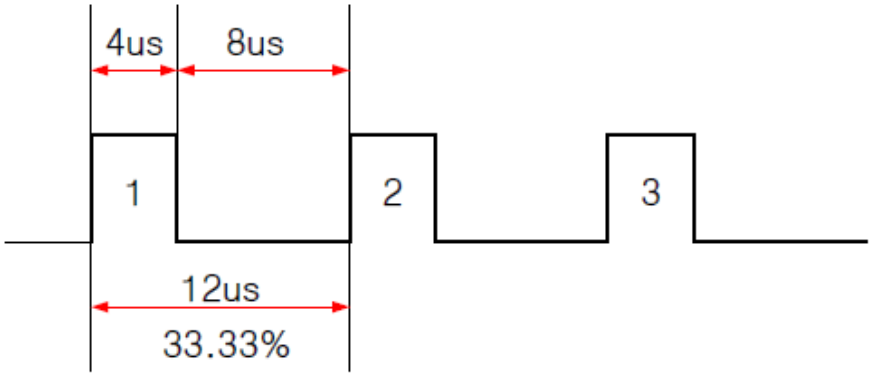


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PULSE ENVELOPE TIMING



PULSE TEST CONDITIONS



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