HD35252
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Class A/AB linear LDMOS design
Compact Small form factor, light weight, high power density
Dual stage Driver, 3dB Divider, Final power amplifiers
Suitable for L-Band pulse applications
Built-in monitoring and protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	1030 MHz				
Internal assemblies	**Output 1 CW**	**Input 2 Pulsed**	**Output 2 Pulsed**		
Power Output @ Pulse	300 mW	100 mW	65 Watt	Peak pulse	
Power Gain	15 dB	N/A	28 dB Min		
Pulse Characteristics	**Width (tp)**	**Duty (δ)**	**PRF**	**Droop**	**Rise / Fall**
	2 µS	10 - 20 %	100 - 400 KHz	<1.0 dB Max	<100 nS Max
Input Power for rated output	+10 dBm Nom				
Input Return Loss	-10 dB Max				
Harmonics	-30 dBc Typ			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	28- 30 VDC Nom				
Current Consumption	2 Amp Avg / 6 Amp Peak Max			δ = 20%, tp = 2µS	
Input Power Protection	+16 dBm Max			<10 Sec without damage	
Load VSWR Protection	∞ : 11 Max			<1 minute at rated Pout	
Turn On / Off Speed	5 µSec Max				

1 Modules could be damaged due to excessive VSWR beyond 1 minute

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport[2]	

2 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	220 x 120 x 38 mm	Excluding connectors
Weight	1440 gr.	
RF Connectors In/Out	SMA Female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

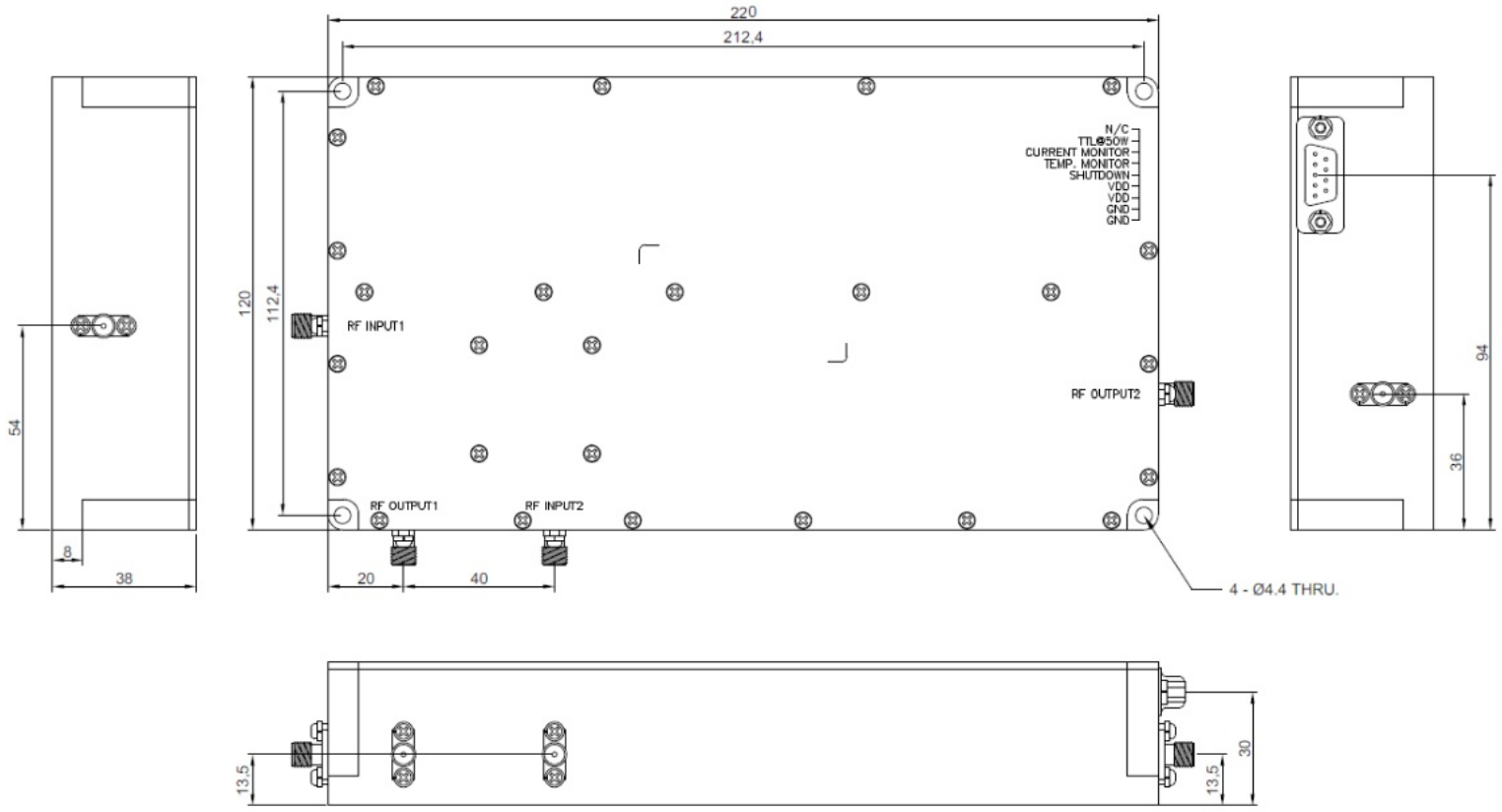
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Specifications subject to change without notice. Specifications and drawings may vary with selected options.

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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	N/C
2	FWD DETECTOR	TTL "High" @ Pout = 50Watt
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "High" - Disable = Open or TTL "Low"
6, 7	VDD	+28VDC
8, 9	GND	Ground

OUTLINE DRAWING



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OUTLINE DRAWING
MODULE CONFIGURATION

