HD31877
SOLID STATE HIGH POWER AMPLIFIER

HD Communications Corp.

FEATURES

Class AB linear LDMOS design
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

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**	**Duty Cycle**	**PRF**	
		10-20 %	100-400 KHz	
Input Power for rated output	10 dBm Nom			
Input Return Loss	10 dB Min			Relative to 50 Ohm
Harmonics 2^{nd} / 3^{rd}	-30dBc Max			At rated Pout
Spurious	-60 dBc Max			Non-harmonics
Operating Voltage	28- 30 VDC Nom			
Current Consumption	2 Amp Ave. / 6AmpPeak Max			At rated Pout
Max Input Power Protection	+16 dBm			<10 Sec without damage
Load VSWR Protection	∞ : 1			<1 minute at rated Pout
Turn On / Off Speed	5 µSec 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	220 x 120 x 38 mm	Excluding connectors
Weight	1440 gr.	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

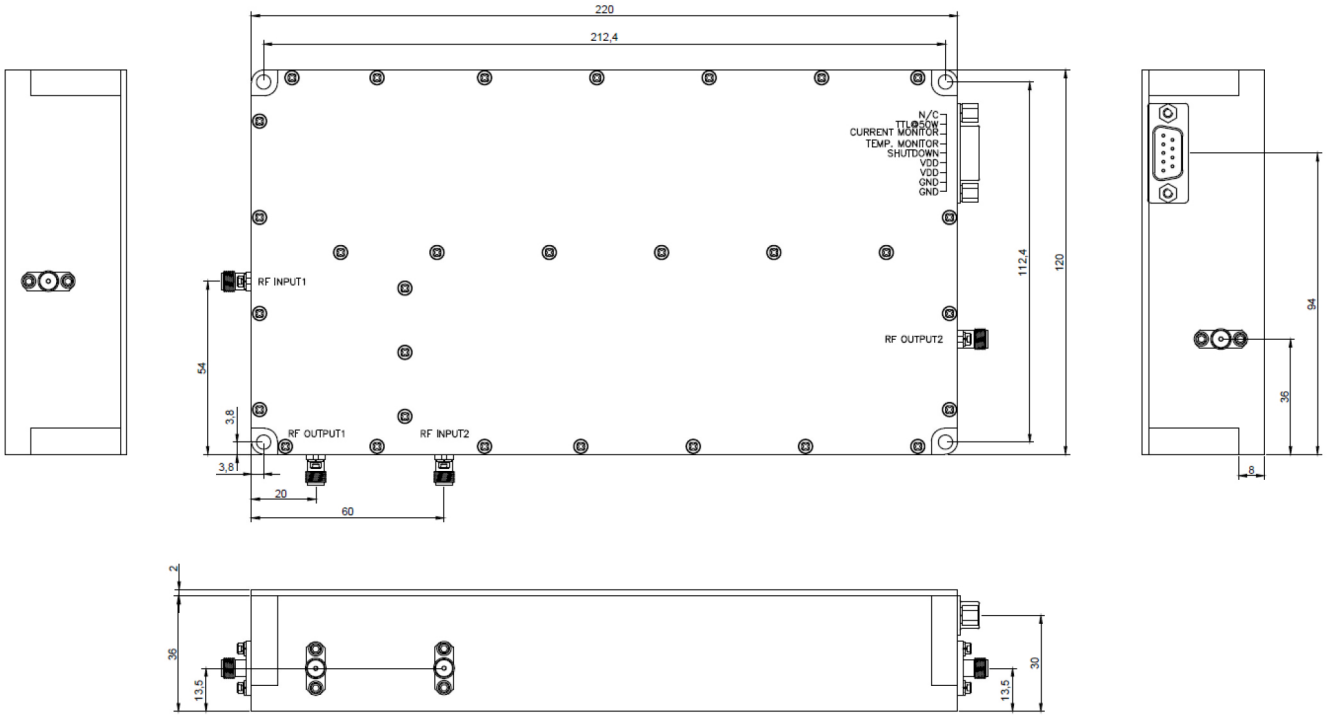
D-SUB CONNECTOR PIN ASSIGNMENT

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

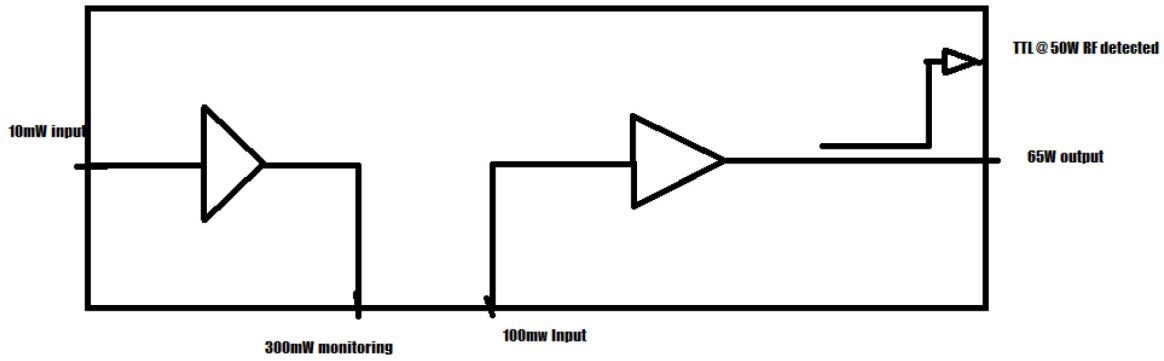
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OUTLINE DRAWING



MODULE CONFIGURATION



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