HD31765
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS booster design
Instantaneous ultra wide bandwidth
Suitable for all single channel modulation standards
Built-in monitoring and protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : @ 25 °C, 50Ω

Parameter	Specification	Notes
Operating Frequency Range	20 - 1000 MHz	
Power Output Psat	100 Watt Min	CW
Power Gain	20 - 30 dB Nom	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input Return Loss	-10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-20 dBc Typ	40dBm/Tone, Δ = 1MHz
Harmonics 2^{nd} / 3^{rd}	-25 dBc / -15 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 32 VDC	
Current Consumption	14 Amp Max	At rated Pout
Operating Input Power	+36 dBm Max	Without damage
Load VSWR Protection	∞ : 1	<1 minute at rated Pout
Turn On / Off Speed	7 µSec Max	Optional

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	162 x 100 x 30 mm	Excluding connectors
Weight	900 gr.	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

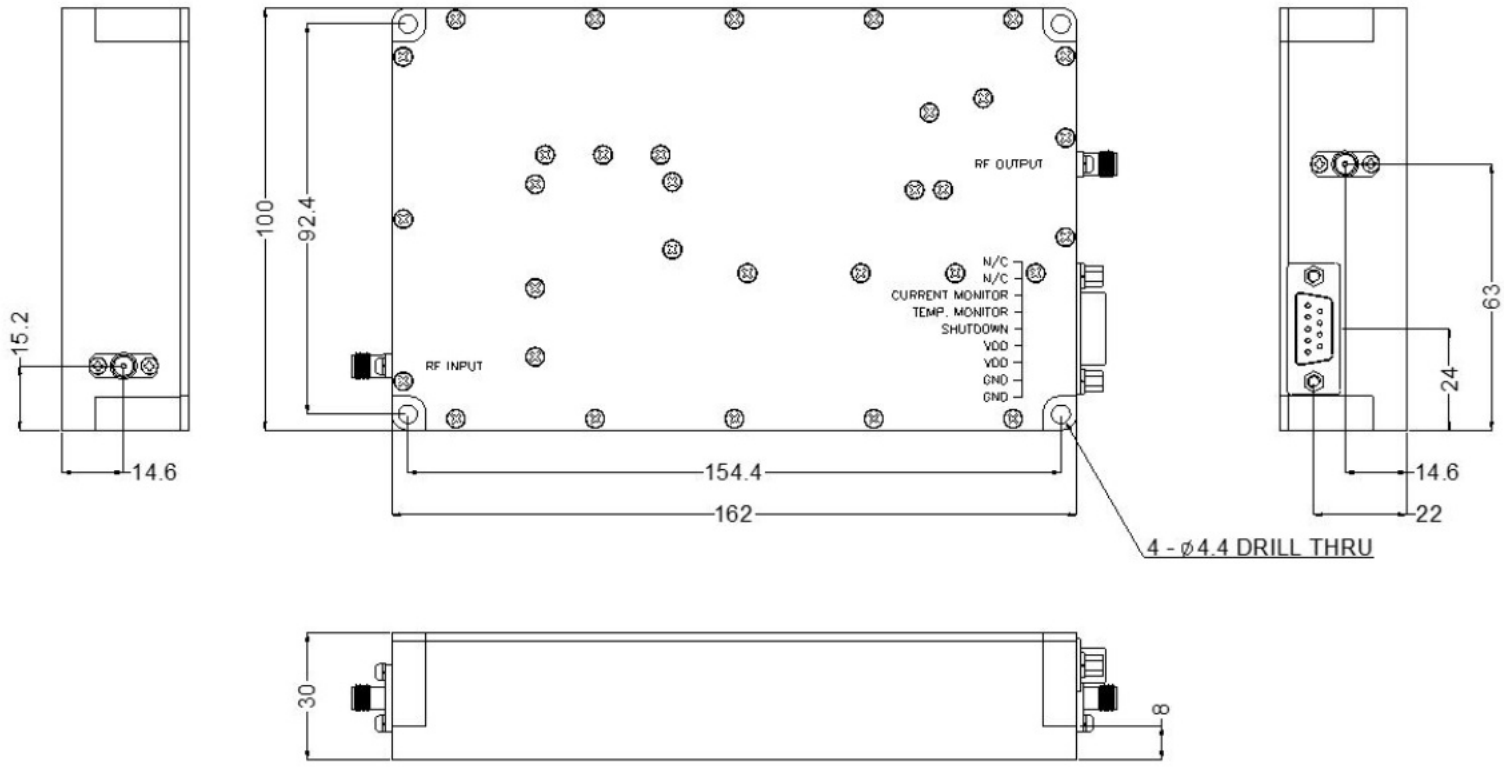
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	N/C
2	N/C	N/C
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL High or Open; Disable = TTL Low or Short
6, 7	VDD	32VDC
8, 9	GND	Ground

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

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OUTLINE DRAWING



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