HD31055
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
Instantaneous wide bandwidth
Suitable for all modulations standards
Built-in monitoring and protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.40 - 2.41 GHz	
Power Output P1dB	100 Watt Min	CW
Small Signal Gain	63 dB Typ	
Power Gain	50 dB Min	
Gain Adjustment Range	20 dB Min	
Input Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	>30dBc Min	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 VDC Nom	
Current Consumption	12 Amp Max	At rated Pout
Max Input Power	-10 dBm	Without damage
Load VSWR Protection	∞ : 1 Min	At rated P1dB
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 Condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	190 x 95 x 27 mm	Excluding Connectors
Weight	700 gr.	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

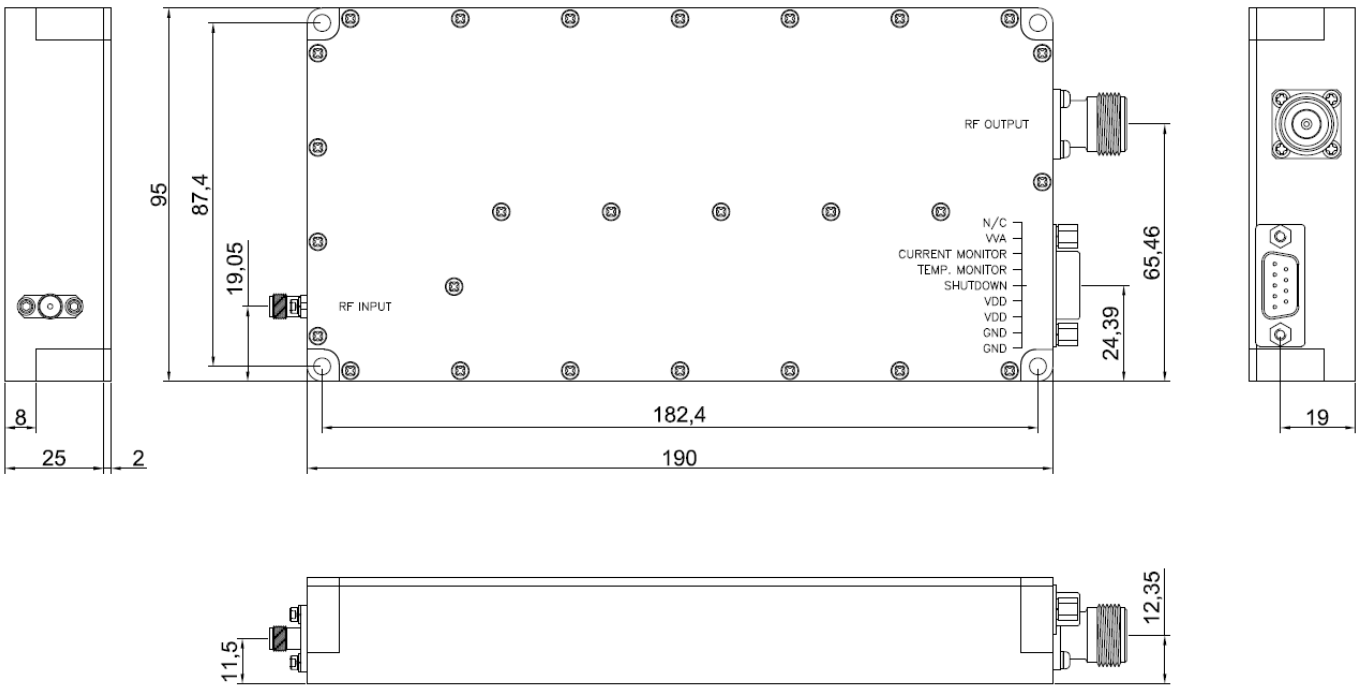
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	VVA	Option-103 - Analog Gain Control
3	CURRENT SENSOR	I_D@20mV/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 - STANDARD



OPTION ORDERING INFORMATION:

OPTION	Function	Description
01	FWD	Forward power detect
03	VVA	Variable Voltage Attenuator

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