HD30981
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
Suitable for S-Band pulse applications
Built-in monitoring and protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.7 - 3.3 GHz	
Peak Output Power	50 Watt Min	Pulse
Pulse Width / Duty Cycle	100 uSec / 20 % Max	
Power Gain	47 dB Min	
Pulse Droop	0.8 dB Max @ Psat	50 µS PW, 20 % Duty
Rise / Fall Time	75 nS Max @ Psat	
Switching Delay Time (Td)	300 nS Typical	
Power Gain Flatness	1.0 dB p-p Max	
Input Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	> 40dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	32 VDC Nom	
Current Consumption	2.0 Amp Max	At rated Pout
Max Input Power	+10 dBm	Without damage
Load VSWR Protection	∞ : 1 Min	

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 96 x 27 mm	Excluding Connectors
Weight	975 gr.	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

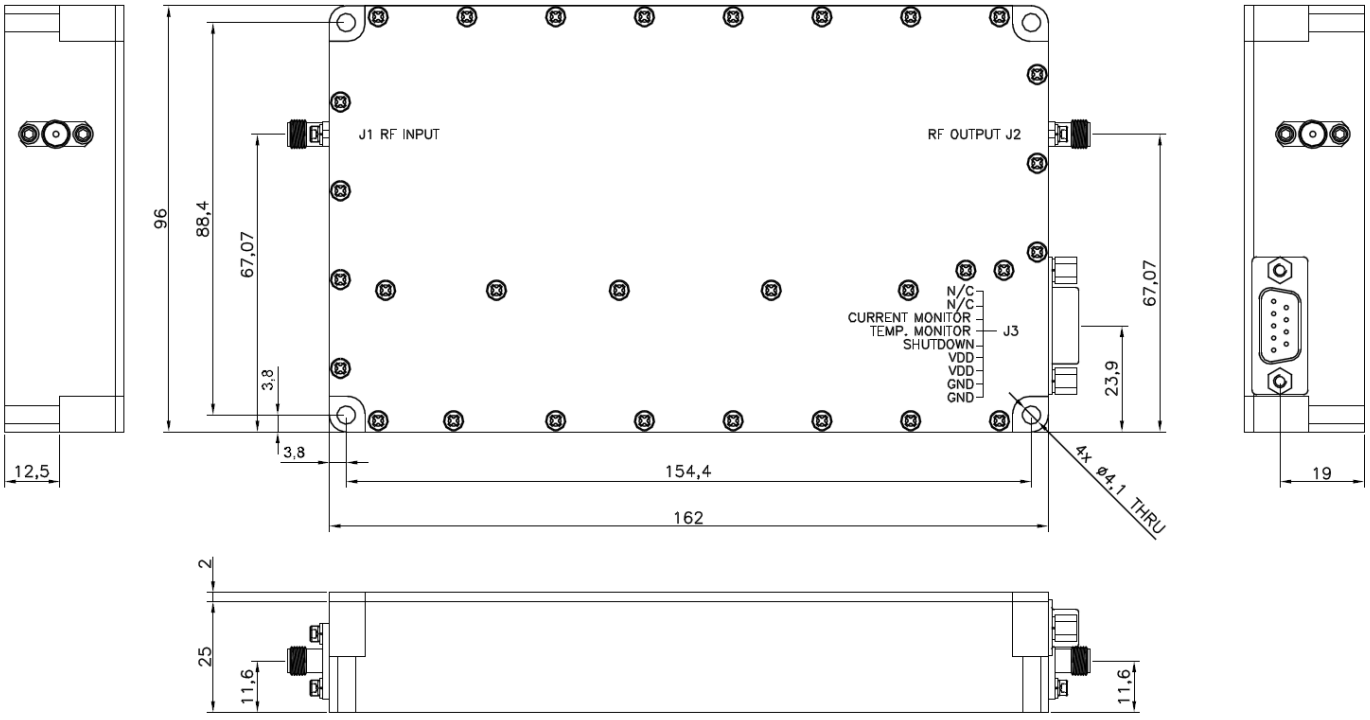
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	VVA	N/C
3	CURRENT SENSOR	I_D @ 20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL “Hi” = Disable Function @ 50mS (**Option**: 5uS Trigger/Pulse Modulator)
6, 7	VDD	TBD
8, 9	GND	Ground

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OUTLINE DRAWING



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