HD31225
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	20 - 500 MHz	
Power Output	350 Watt Min	CW
Power Output @ P1dB GCP	250 Watt Min	
Power Gain	22 dB Min / 24 dB Typ	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	<-30dBc Typ	45dBm/Tone, Δ = 1MHz
Harmonics 2^{nd} / 3^{rd}	-15 dBc / -30 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 30 VDC	
Current Consumption	40 Amp Max	At rated Pout
Input Power Protection	4 Watt Max	<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-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	360 x 270 x 30 mm	Excluding connectors
Weight	5.85 Kg.	
RF Connectors In/Out	SMA female / Type-N Female	
DC Power / Interface Connector	9 Pin Hybrid D-Sub	9W4
Cooling	External Heatsink	Forced air required

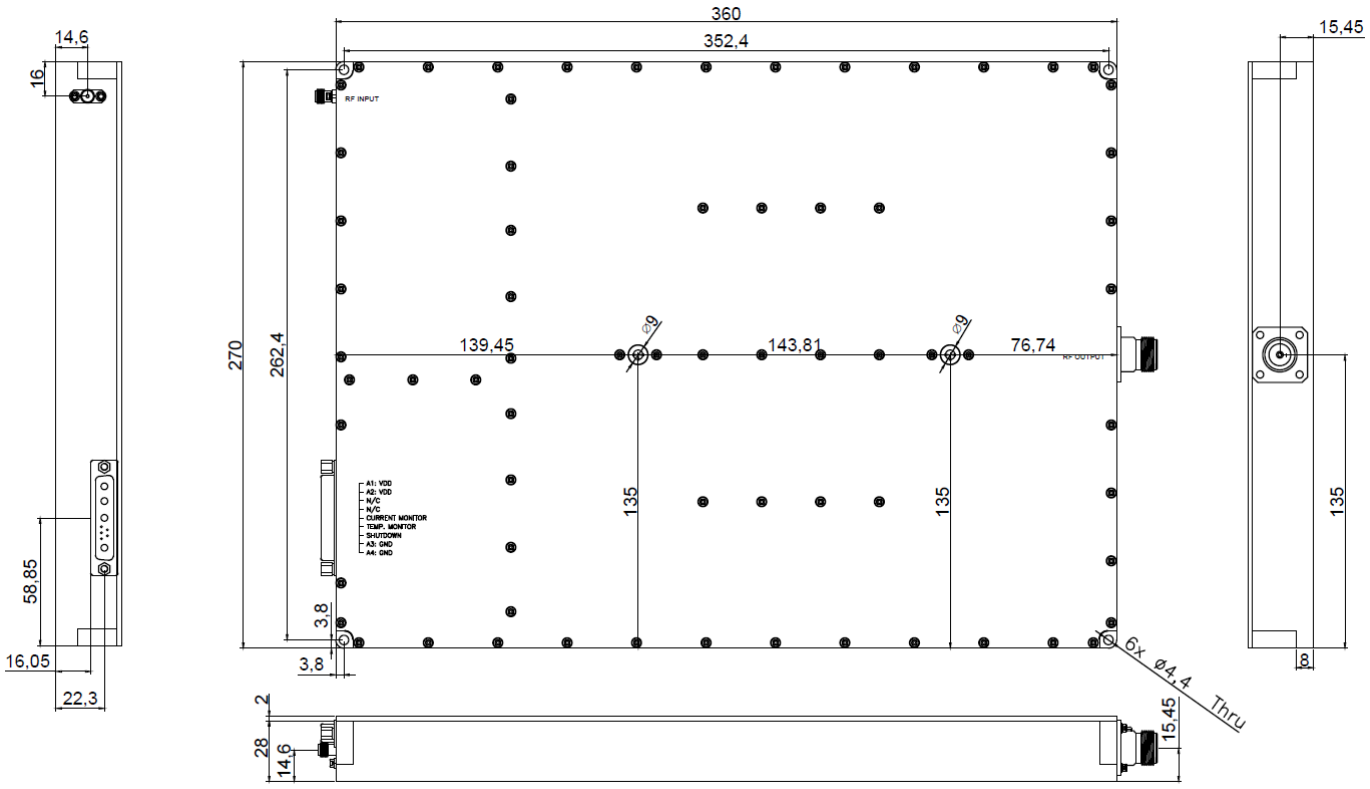
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	
2	N/C	
3	CURRENT SENSOR	I_D@10mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1, A2	VDD	28VDC
A3, A4	GND	Ground

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OUTLINE DRAWING



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