HD31945
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class A linear GaAsFET design
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	13.5 - 14.5 GHz	
Power Output @ P1dB GCP	1.0 Watt Min	CW
Small Signal Gain	30 dB Min	
Input VSWR	1.5 : 1 Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	22 dBm/Tone, Δ = 1 MHz
Harmonics	-30 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	6.0 dB Typ	
Operating Voltage	12 - 15 VDC Nom	
Current Consumption	1.0 Amp Mom	At rated Pout
Max Input Power Protection	+10 dBm	<10 Sec without damage
Load VSWR Protection	∞ : 1	O/P Isolator

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	240 x 180 x 30 mm	Excluding connectors
Weight	TBD	Typical Weight
RF Connectors In/Out	SMA F / SMA F	
DC Power / Interface Connector	Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

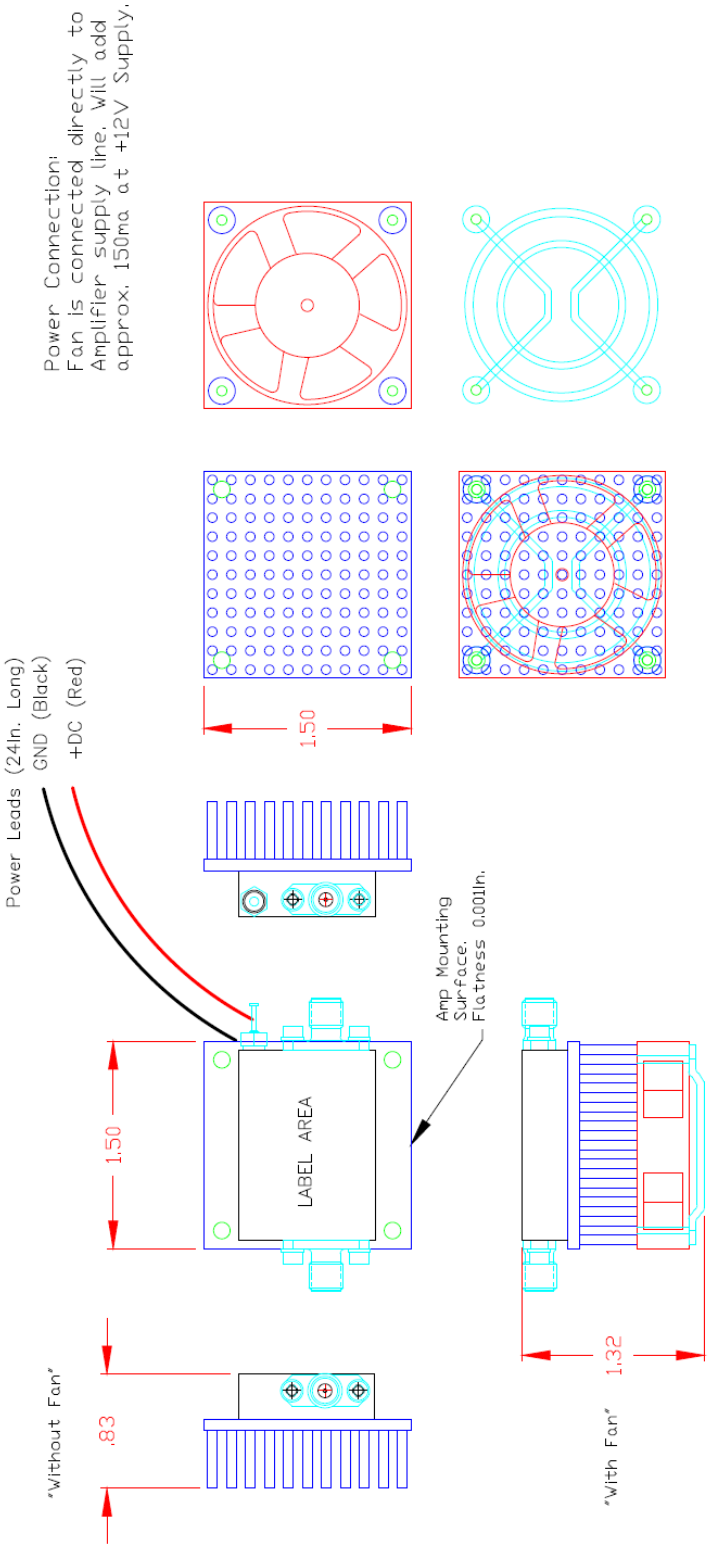
FEED THRU

Pin	Function	Description
1	VDD	12VDC
2	GND	Ground

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PRELIMINARY OUTLINE DRAWING



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