HD31158
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

High Power Class AB linear GaN MPM
Suitable for CW and Pulse applications
Instantaneous ultra-wide Bandwidth
Built-in monitoring and protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	7.5 - 18.0 GHz	
Power Output Past CW or Pulse	105 Watt Min	Over -25°C to +25°C
Linear Gain	55 dB Min	
Linear Dynamic Range	25 dB Min	
Power Gain Flatness	4.0 dB p-p Max	
Input Return Loss	12 dB Min	
Time Delay	10 nS	
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	
Noise Figure	10 dB Max	Non-harmonics
Operating Voltage	28 -31 VDC Nom	
Power Consumption	480 Watt Max	At rated Pout
Load VSWR Protection	3 : 1	
AM to PM Conversions	6 Deg. per dB Max	
Unit to Unit Phase Tracking	25 Deg. Max	Over 16 to 18GHz

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-25 to +100 °C	-40-+70C ambient
Storage Temperature	-40 to +85 °C	
Altitude	0 to 10,000 feet	
Relative Humidity	100 %	
Acceleration	8 gs	
Shock	20 g, 11 mS all axis	
Vibration	0.04 g2/Hz from 20 to 1000 Hz -6 dB/octave 1000 to 2000 Hz	

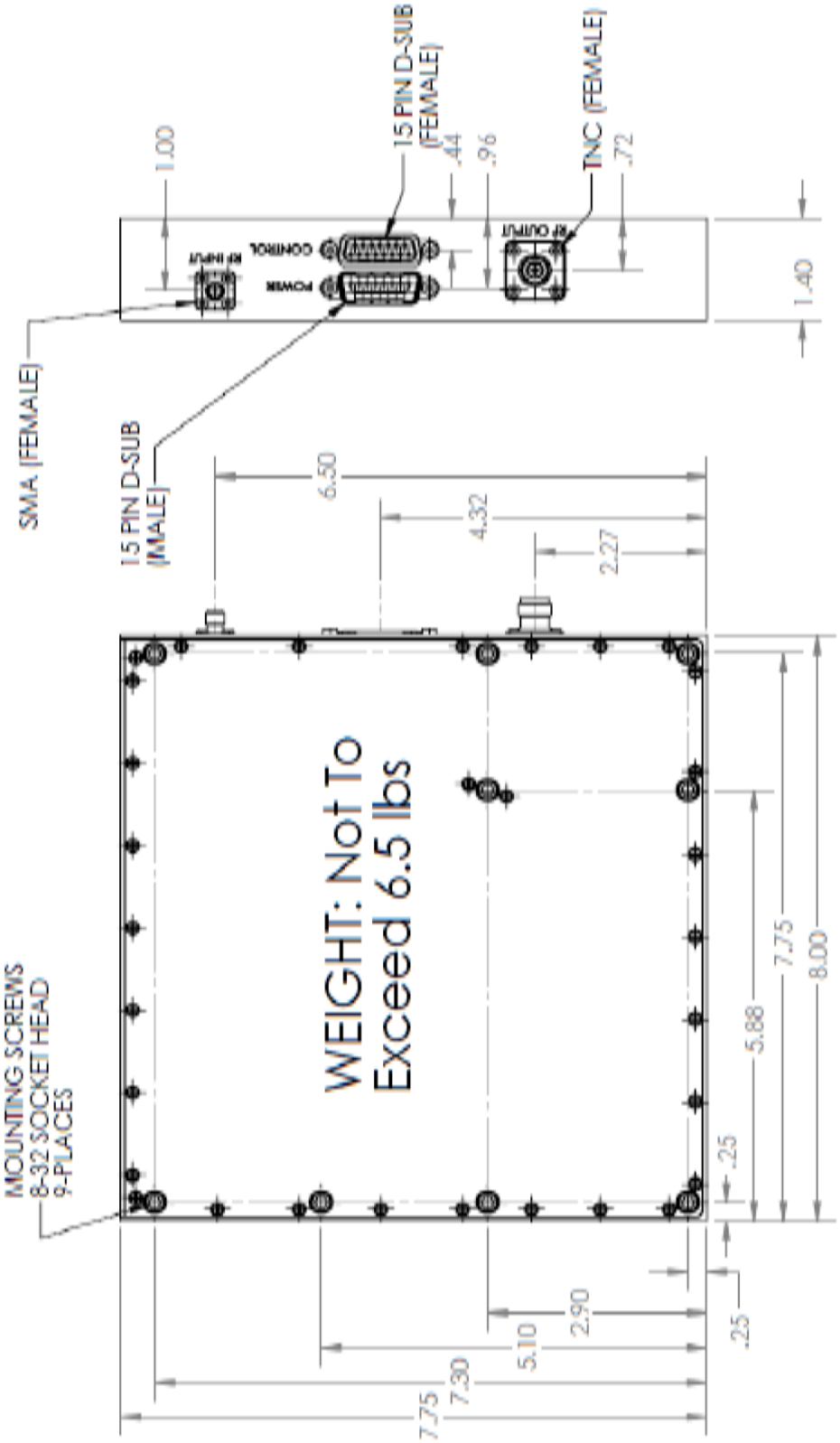
MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	7.75 x 8 x 1.4 inch	Excluding Connectors
Weight		
RF Connectors In/Out	SMA-Female / TNC-Female	Cover Flange
DC Power / Interface Connector	2 x 15 Pin D-Sub Female	
Cooling	External Heatsink	Forced air required

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OUTLINE DRAWING



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