HD Communications Corp.

HD31884
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
UHF high power dual input and dual output
Suitable for all single channel modulation standards
Built-in monitoring and protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS: Per channel

Parameter	Specification	Notes
Operating Frequency Range	215 - 220 MHz	
Power Output @Psat	600 Watt Min	CW - Per output
Power Gain	56 dB Min	
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	45dBm/Tone, Δ = 1MHz
Harmonics	>30dBc	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	50 VDC Nom	
Current Consumption	56 Amp Max	At rated Pout
Max Input Power	+3 dBm	Without damage
Load VSWR Protection	5 : 1 Min	
Turn On / Off Speed	5 µSec Max	Optional

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	270 x 250 x 27 mm	Excluding Connectors
Weight	TBD	Typical Weight
RF Connectors In/Out	SMA-F / Type-N	
DC Power / Interface Connector	9-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT per channel

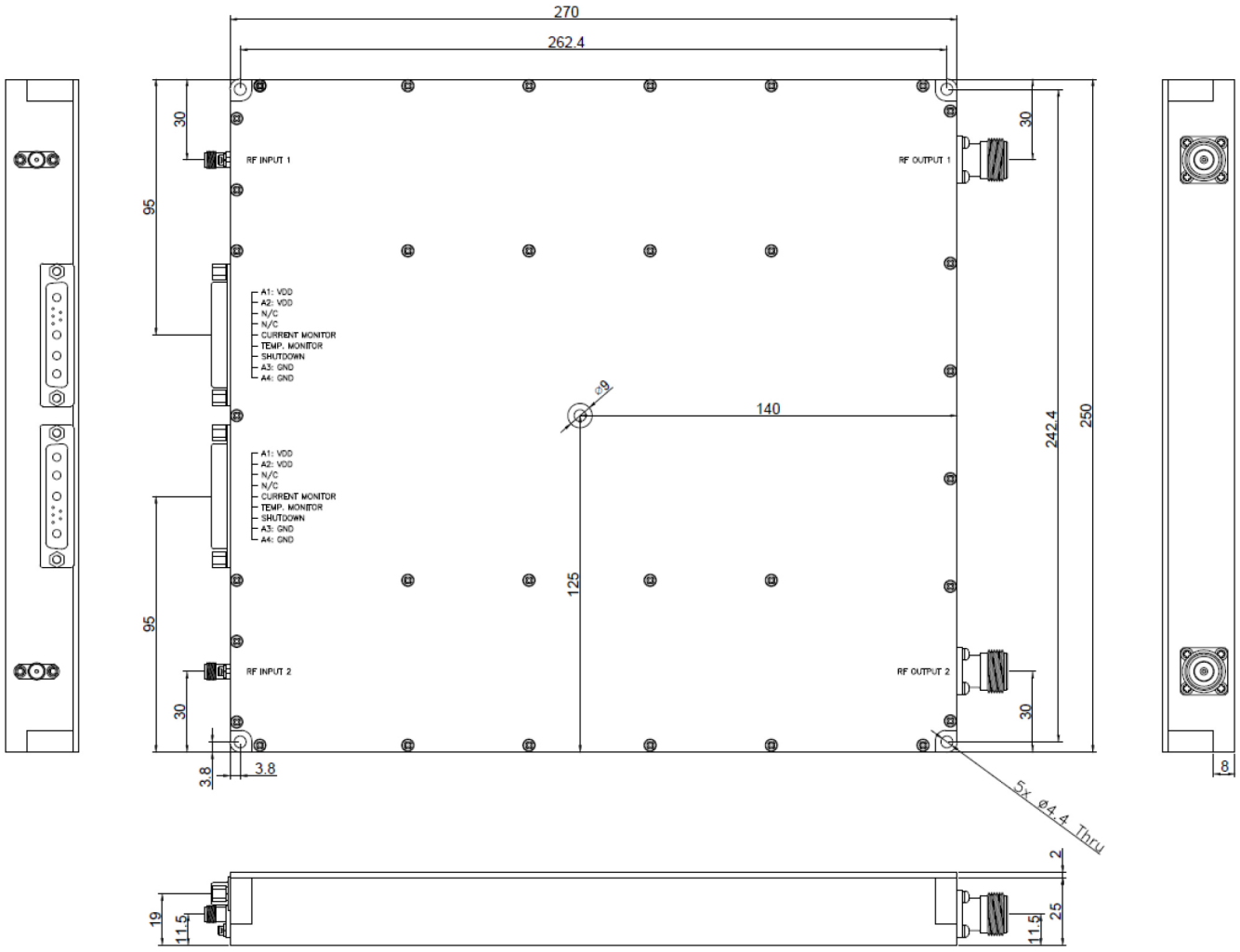
Pin	Function	Description
1	FWD PWR INDICATOR	N/C
2	REV PWR INDICATOR	N/C
3	CURRENT SENSOR	I_D @ 20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1, A2	VDD	50VDC
A3, A4	GND	Ground

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfamplifiers.com www.rfcomp.com sales@hdcom.com

Communications Corp.

HD31884
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfamplifiers.com www.rfcomp.com sales@hdcom.com