

DESCRIPTION

This class AB LDMOS module is designed for both military and commercial applications. It is capable of supporting any signal type and modulation format, including but not limited to 3-4G telecom, WLAN, OFDM, DVB, and CW/AM/FM. The latest device technologies and design methods are employed to offer high power density, efficiency, and linearity in a small, lightweight package.



FEATURES

Manual Tx/Rx Switching (TTL)

Optional Heatsink

Specifications subject to change without notice. Typical performance at +28VDC at 25°C in a 50Ω system

Tx SPECIFICATIONS				
PARAMETER	MIN	TYP.	MAX	UNIT
Operating Frequency	2400		2500	MHz
PSat Power Output		+44.0		dBm
Gain	24.0	25.0		dB
Gain Flatness		1.0		± dB
Input Return Loss	-12	-16		dB
Operating Voltage	+27	+28	+30	VDC
Current Draw			2.4	A
Tx / Rx Switching Time		1.0	2.0	μS

Rx SPECIFICATIONS				
PARAMETER	MIN	TYP.	MAX	UNIT
P1dB Power Output		+5.0		dBm
Gain		11.0		dB
Gain Flatness		0.5	1.3	dB
Noise Figure		2.0	3.0	dB
OIP3		+15.0		dBm
Input Return Loss	-12	-11		dB
Current Draw		40.0	80.0	mA

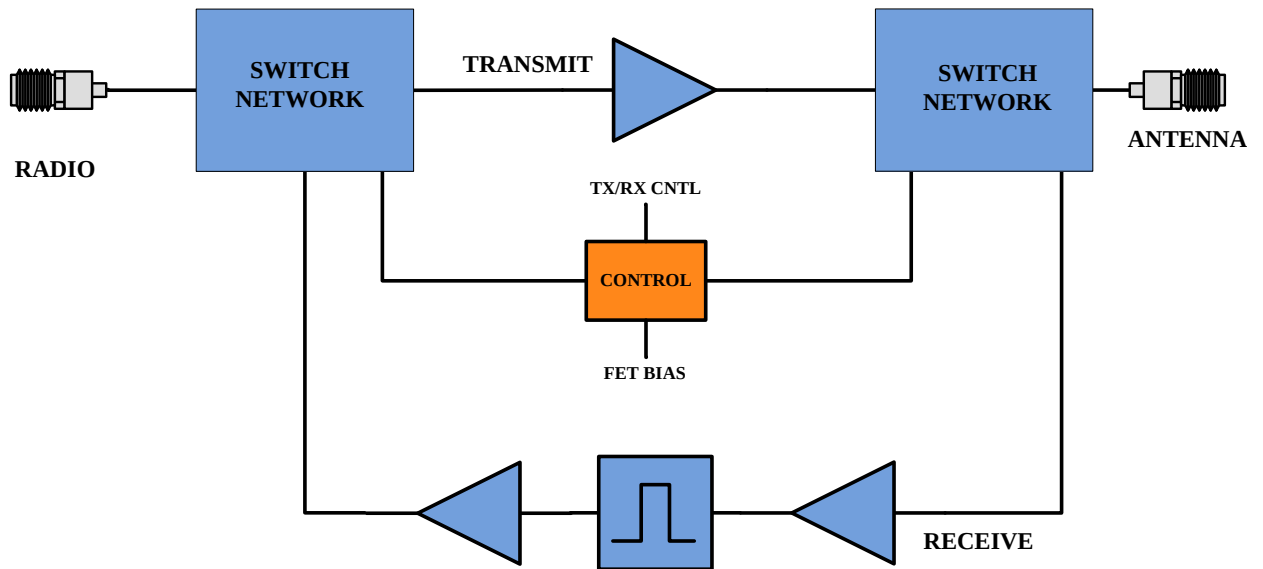
MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	3.33 x 2.69 x 0.65	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	Circular Locking	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--
Weight	5	oz.
Weight With Heatsink	15	oz.

ENVIRONMENTAL / PROTECTIONS			
PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Storage Temp Range	-60	+100	°C
Humidity Range	0-100		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	+22		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+90		°C

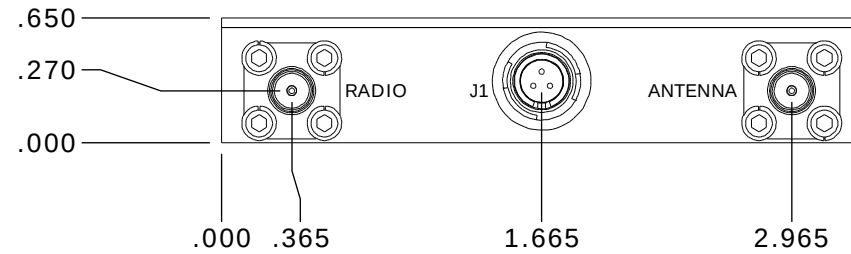
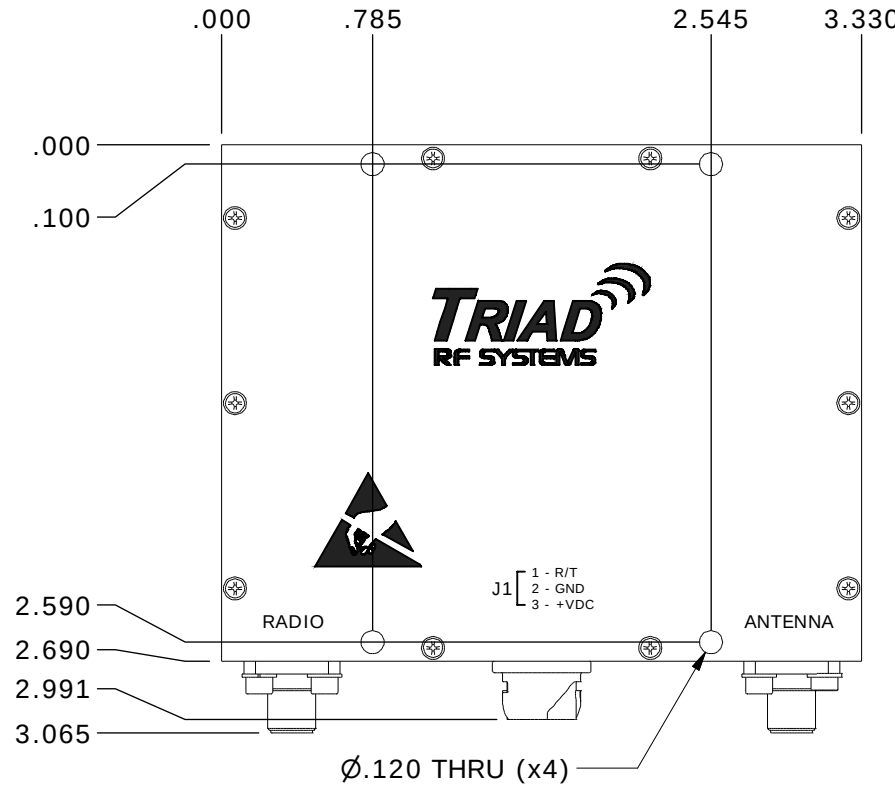
DC / CONTROL PINS		
PIN LABEL	NAME	DESCRIPTION
1	Tx/Rx	Tx / Rx Switching (+5V = Tx Amp Active / 0V = Rx Amp Active)
2	GND	Ground
3	+VDC	Supply Voltage - Range Specified in Datasheet

DATA RATE VS. OUTPUT POWER	
OFDM MODULATION	POUT (W)
64QAM OFDM	6.31
16QAM OFDM	11.22
QPSK	12.59
BPSK	19.95

See our [application note](#) that describes how this table was calculated and provides notes on in-system performance



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	08/03/2014	DMC

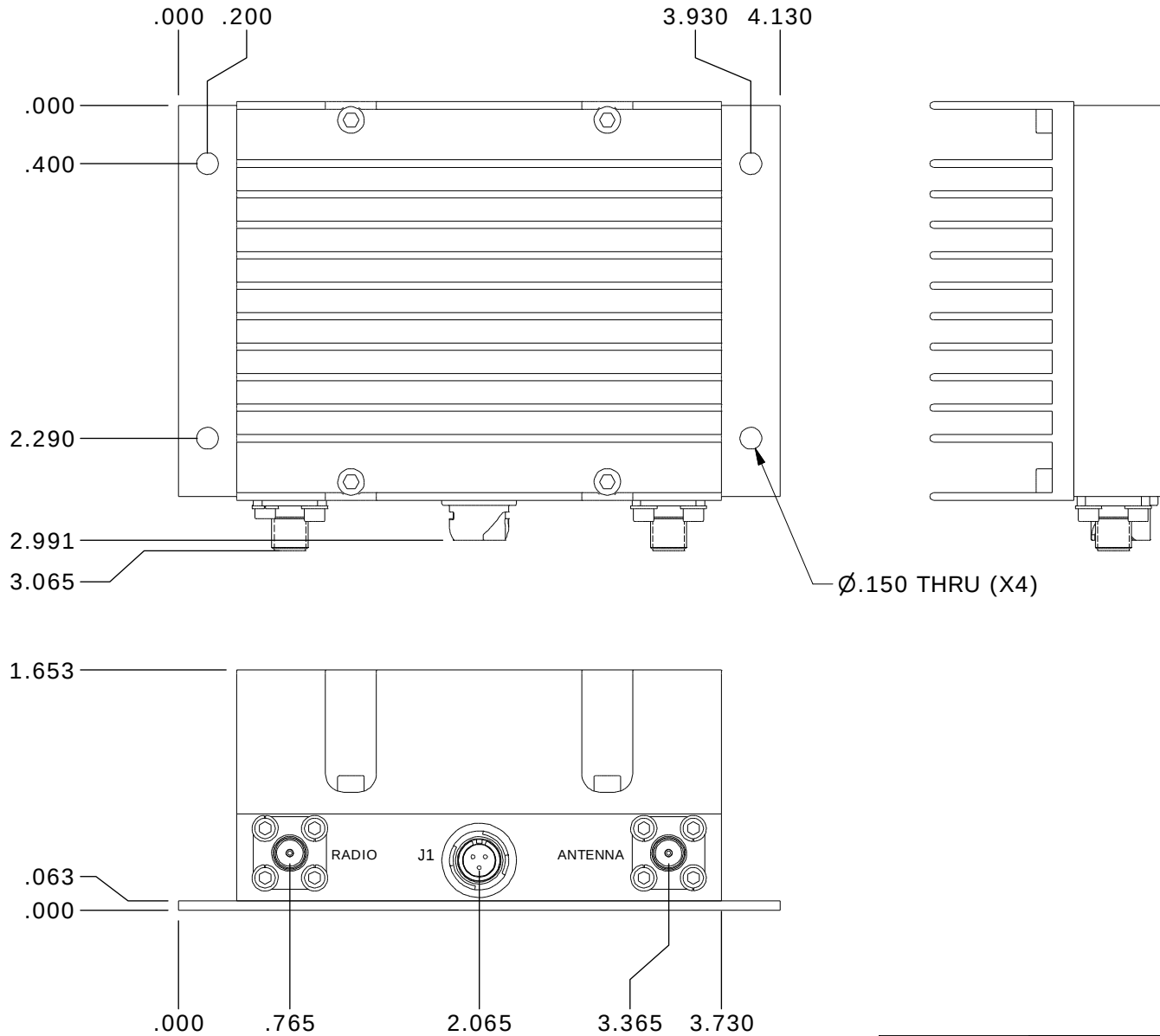


DRAWN	AHA	6/17/2014
DESIGNED	DCH	7/12/2013
CHECKED	BG	6/17/2014
ENG APPROVED		
MFG APPROVED		

DIMENSIONS ARE IN INCHES
UNLESS SPECIFIED OTHERWISE
TOLERANCES
DECIMALS FRACTIONS ANGLES
.XX ±.01 ± 1/32 ± 2°
.XXX ±.005

		180 TICES LANE BUILDING A, SUITE 107 EAST BRUNSWICK, NJ 08816 855-558-1001	
		HOUSING OUTLINE DRAWING 118	
SIZE A	DWG NO. OL_118	REV 0	
SCALE: NONE	CAGE CODE 67DZ3	SHEET 1 OF 3	

OPTIONAL HEATSINK



DRAWN	AHA	6/17/2014	HOUSING OUTLINE DRAWING 118		
DESIGNED	DCH	7/12/2013			
CHECKED	BG	6/17/2014	SIZE A	DWG NO. OL_118	REV 0
ENG APPROVED					
MFG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 3

A

B

C

D

E

1

2

3

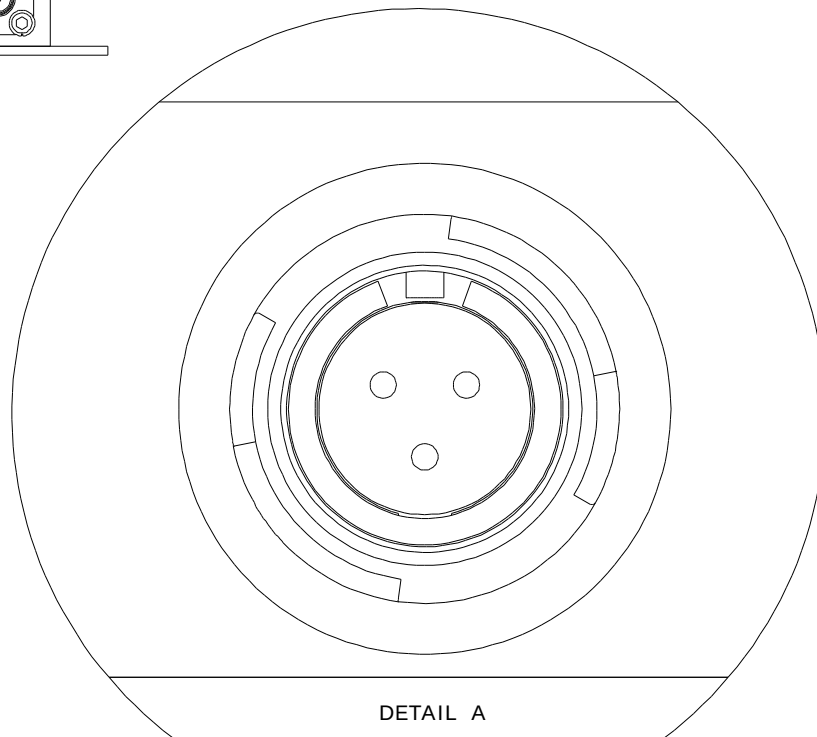
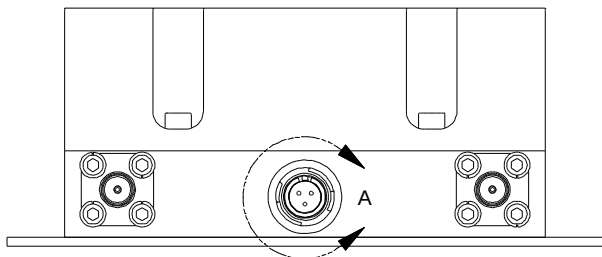
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1

2

3

4



PINOUT TABLE		
PIN	LABEL	FUNCTION
1	R/T	RX/TX
2	GND	GROUND WIRE
3	+DC	SUPPLY VOLTAGE

NOTES:

1. VIEW FACING CONNECTOR INTERFACE (AMP SIDE).
2. P/N OF CONNECTOR ON AMPLIFIER: HIROSE LF07WBP-3P.
3. UNIT SHOWN WITH OPTIONAL HEATSINK.

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ENG APPROVED			A			
MFG APPROVED			SCALE: NONE	CAGE CODE	67DZ3	SHEET 3 OF 3