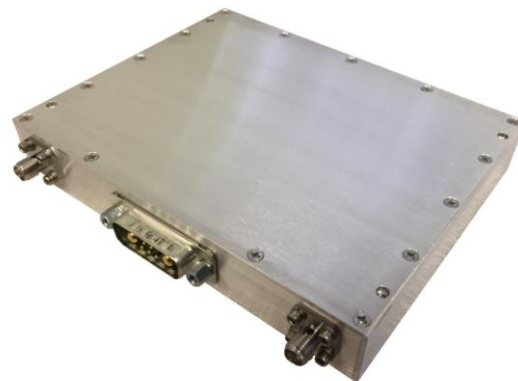


**DESCRIPTION**

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**

High Speed On/Off Control

Temp. Monitor Output

Over / Under Voltage Protection

Optional Heatsink

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

RF / ELECTRICAL				
PARAMETER	MIN	TYP.	MAX	UNIT
Operating Frequency	400		450	MHz
PSat Power Output	+51.0	+52.0		dBm
Gain	55.0	58.0		dB
Gain Flatness		0.8	1.0	dB <sup>1</sup>
Input Return Loss	-14	-15		dB
Operating Voltage	+27	+28	+29	VDC
Current Draw		9.0	11.0	A
Quiescent Current Draw		1.5		A
Switching Time		1.0	2.0	uS

1 – Gain flatness recorded represents a peak-peak measurement across the **entire operating band**. Gain flatness is typically much lower across significant portions of this band. Consult the gain response plots for details if available.

## MECHANICAL

PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	4 x 5 x 0.8	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Threaded Holes	--
Weight	18	oz.
Weight with Heatsink	37	oz.

## ENVIRONMENTAL / PROTECTIONS

PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Humidity Range	0-100		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
PA Baseplate Shutoff Temperature	+ 85		°C

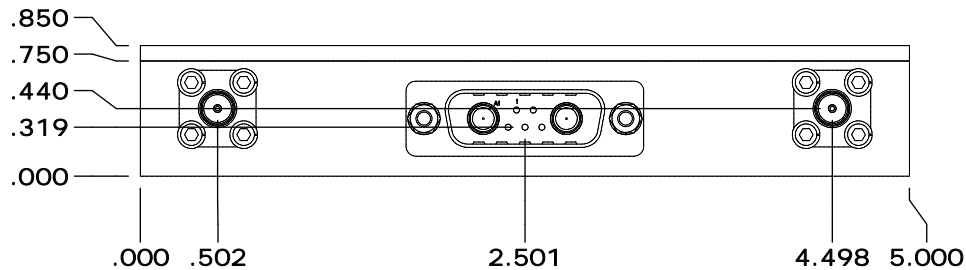
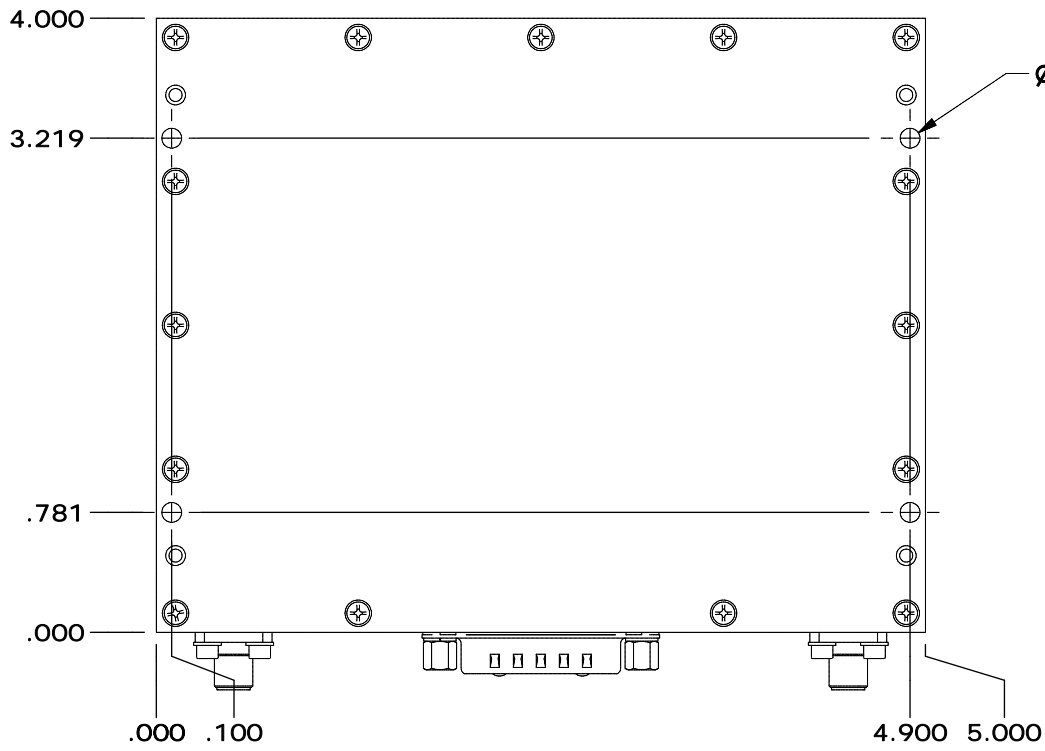
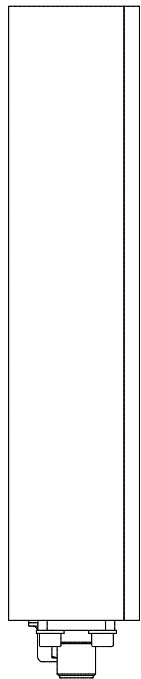
## INPUT/OUTPUT PINS

<b>AMPLIFIER CONNECTOR TYPE:</b>		7W2 MALE
<b>TRIAD CABLE PART NUMBER:</b>		CBL42
PIN NUMBER	LABEL	DESCRIPTION
A1	GND	Ground
1	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) *100
2	Amp Enable	TTL Hi or No Connection = Enable, TTL Lo = Disable
3	Status	3.3V TTL Logic Output. TTL High = Fault, TTL Low = No Fault
4	GND	Ground
5	NC	Not Connected
A2	+VDC	Supply Voltage - Range Specified in Datasheet

## Configuration Options

Model Number	Description
TA1181	No Heat Sink Included
TA1181 - HS	Standard Heat Sink
TA1181 - HSF	Heat Sink with Integrated Cooling Fan
TA1181 - HSX	Custom Heat Sink Configuration
TA1181 - DOX	Custom Amplifier Configuration (issued by Triad upon customer request)

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	4/6/17	SC
1	E18368	8/15/18	SC



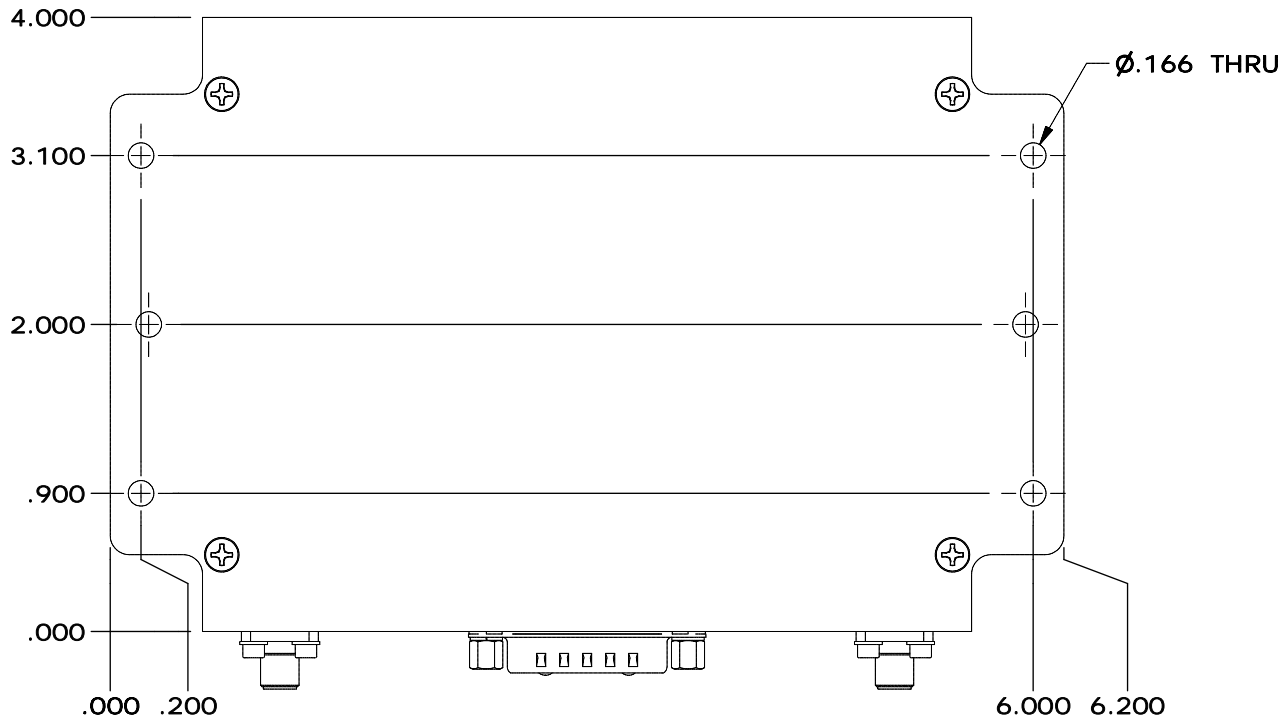
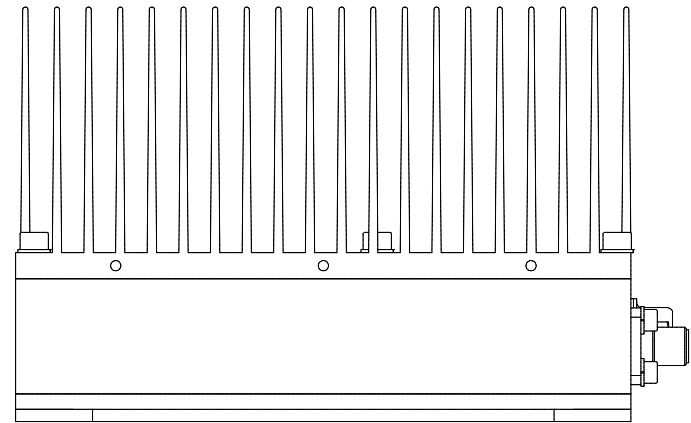
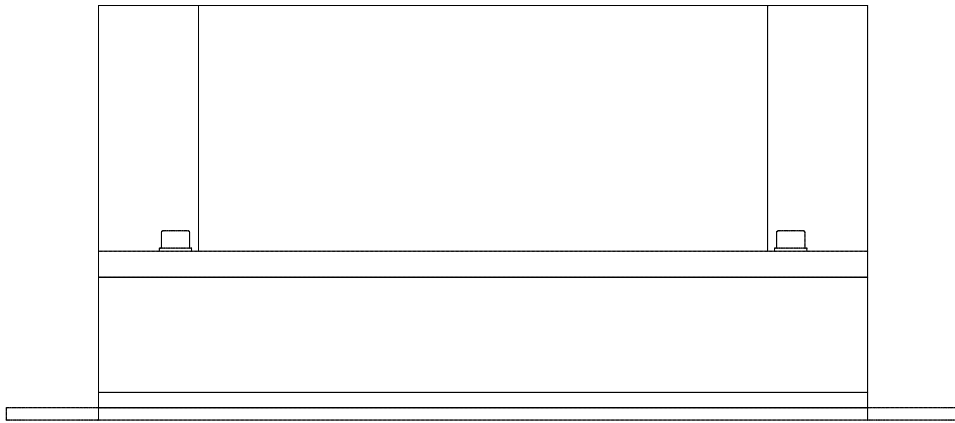
DRAWN	scopp	4/6/2017
DESIGNED	scopp	10/28/2016
CHECKED		
ENG APPROVED		
MFG APPROVED		

**TRIAD** RF SYSTEMS  
 11 HARTS LANE SUITE 1  
 EAST BRUNSWICK, NJ 08816  
 855- 558- 1001

HOUSING OUTLINE DRAWING 147

DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE TOLERANCES		SIZE	DWG NO.	REV
DECIMALS	FRACTIONS	ANGLES	A	1
XX ±.01	± 1/32	± 2°	OL_147	
.XXX ±.005			SCALE: NONE	CAGE CODE 67DZ3
			SHEET 1 OF 2	

# HEATSINK



DRAWN	scopp	4/6/2017	HOUSING OUTLINE DRAWING 147		
DESIGNED	scopp	10/28/2016	SIZE	DWG NO.	REV
CHECKED			A	OL_147	1
ENG APPROVED			SCALE: NONE	CAGE CODE	SHEET 2 OF 2
MFG APPROVED				67DZ3	