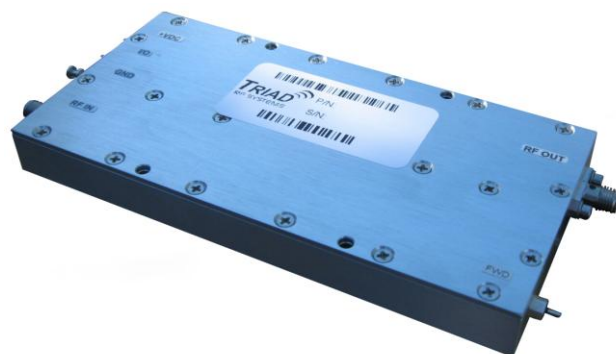


DESCRIPTION

This class A GaAs 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

Over / Under / Reverse Voltage Protection
Forward Power Measurement

High Speed On/Off Control
Optional Heatsink

Specifications subject to change without notice. Typical performance at +12VDC +25°C, and in a 50Ω system.

RF / ELECTRICAL				
PARAMETER	MIN	TYP.	MAX	UNIT
Operating Frequency	2000		2700	MHz
P1dB Power Output	+37.0	+38.0		dBm
Gain	36.0	37.0		dB
Gain Flatness		2.0	4.5	dB ¹
Input Return Loss	-11	-14		dB
Operating Voltage	+11	+12	+13	VDC
Current Draw		1.8	2.0	A
Quiescent Current Draw		2.0		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)	5 x 2.5 x 0.553	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	Feedthru Pins	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--
Weight	7	oz.
Weight with Heatsink	17	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		--
Max RF Input	+4		dBm
PA Baseplate Shutoff Temperature	+ 90		°C

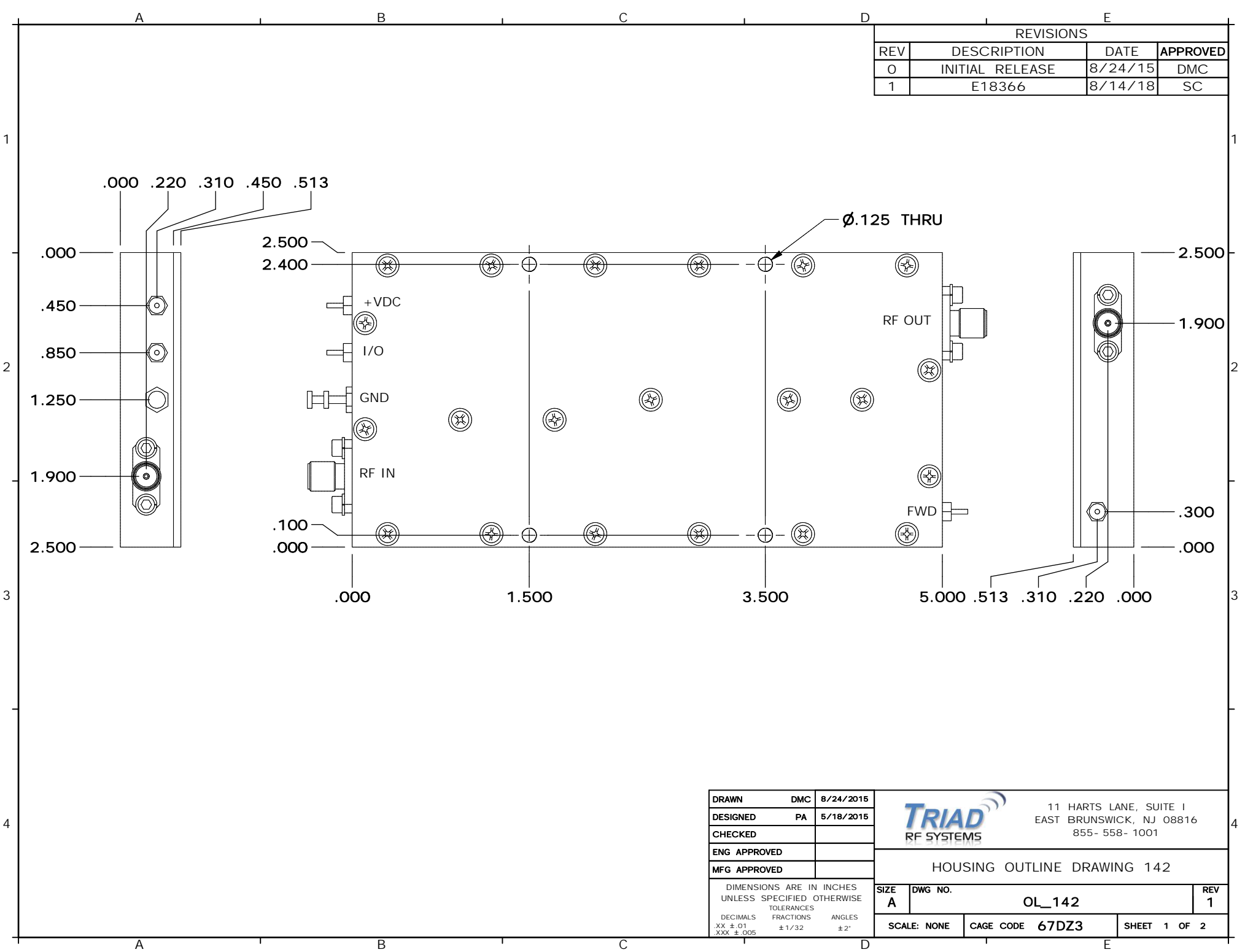
INPUT/OUTPUT PINS

AMPLIFIER CONNECTOR TYPE:		FEEDTHROUGH PINS
TRIAD CABLE PART NUMBER:		N/A
PIN NUMBER	LABEL	DESCRIPTION
1	+VDC	Supply Voltage - Range Specified in Datasheet
2	Amp Enable	TTL Hi or No Connection = Enable, TTL Lo = Disable
3	GND	Ground
4	FWD	Forward Power Measurement

Configuration Options

Model Number	Description
TA1010	No Heat Sink Included
TA1010 – HS	Standard Heat Sink
TA1010 – HSF	Heat Sink with Integrated Cooling Fan
TA1010 – HSX	Custom Heat Sink Configuration
TA1010 – DOX	Custom Amplifier Configuration (issued by Triad upon customer request)

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	8/24/15	DMC
1	E18366	8/14/18	SC



DRAWN	DMC	8/24/2015
DESIGNED	PA	5/18/2015
CHECKED		
ENG APPROVED		
MFG APPROVED		

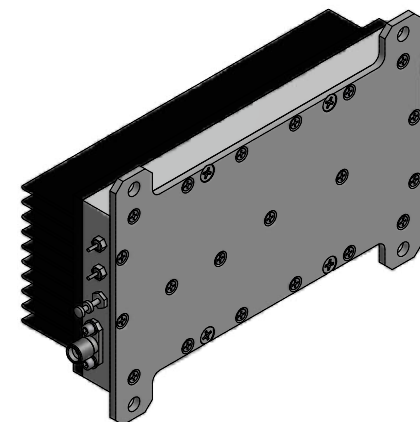
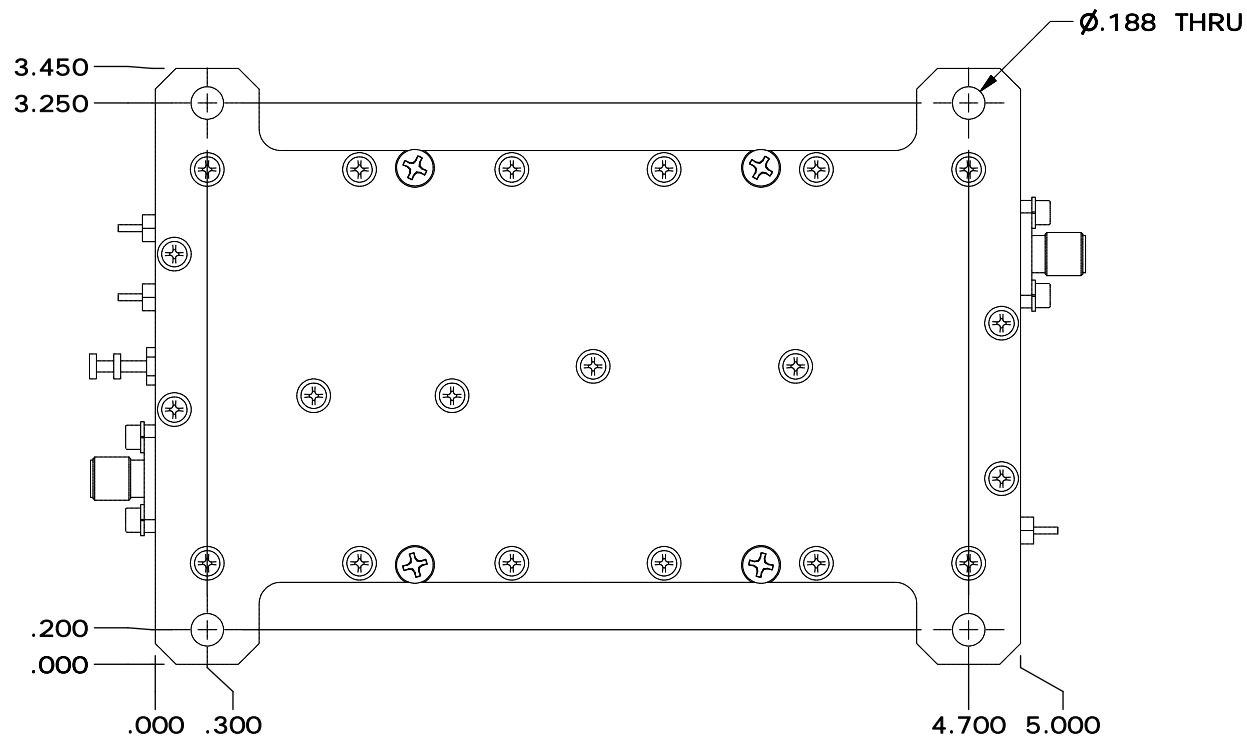
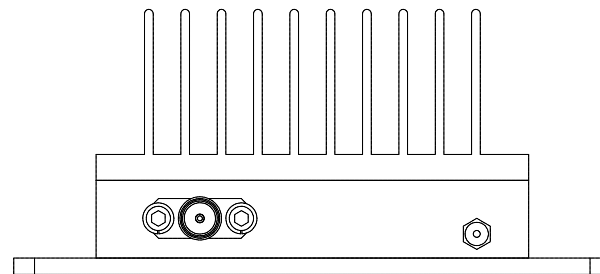
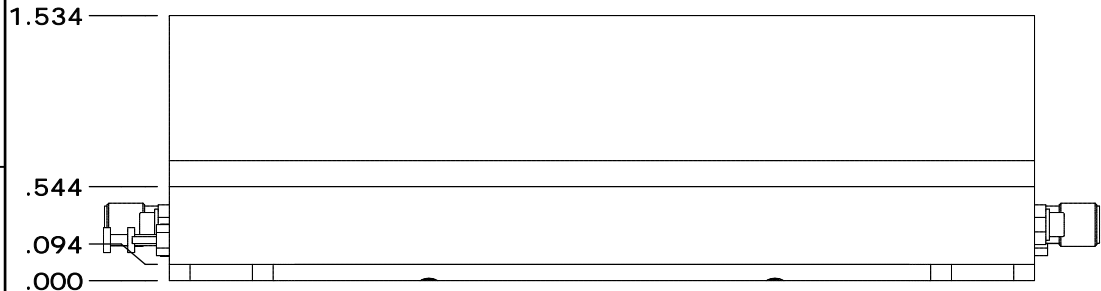


11 HARTS LANE, SUITE 1
 EAST BRUNSWICK, NJ 08816
 855- 558- 1001

HOUSING OUTLINE DRAWING 142

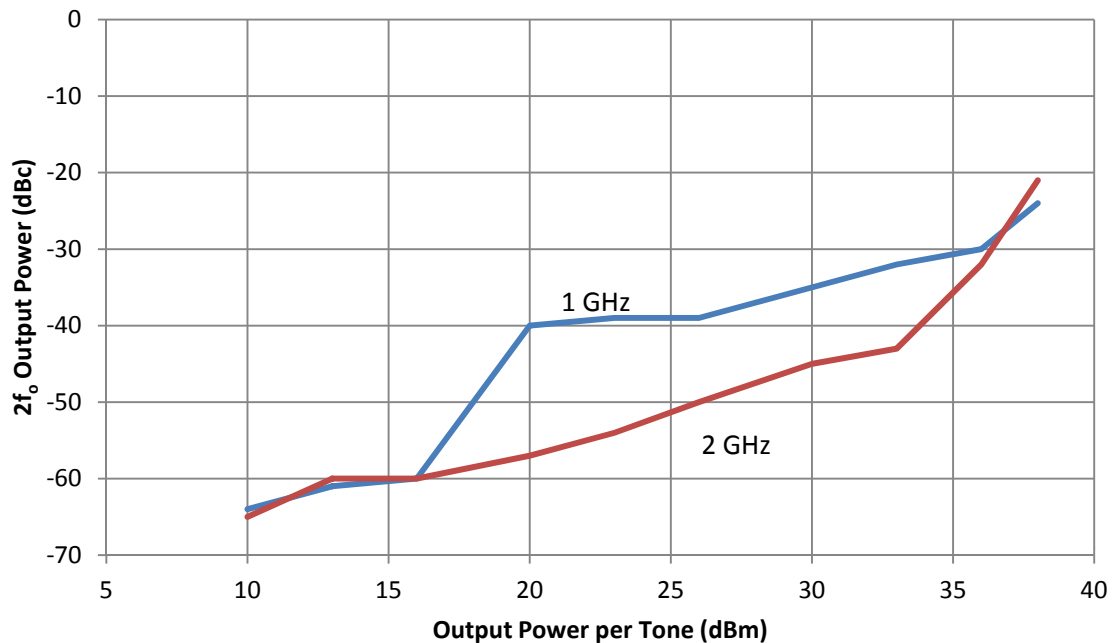
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE		SIZE	DWG NO.	REV
TOLERANCES		A	OL_142	1
DECIMALS	FRACTIONS	ANGLES	SCALE: NONE	CAGE CODE 67DZ3
XX ±.01	± 1/32	± 2°	SHEET 1 OF 2	
.XXX ±.005				

OPTIONAL HEATSINK



DRAWN	DMC	8/24/2015	HOUSING OUTLINE DRAWING 142		
DESIGNED	PA	5/18/2015	SIZE	DWG NO.	REV
CHECKED			A	OL_142	1
ENG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 2
MFG APPROVED					

2nd Harmonic vs. Output Power vs. Freq.



3rd Harmonic vs. Output Power vs. Freq.

