

## DESCRIPTION

This class AB GaN 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-Temperature Protection

Temperature Compensation

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	4400		5000	MHz
PSat Power Output		+47.0		dBm
Gain	40.0	44.0		dB
Input Return Loss	-15	-18		dB
Operating Voltage	+10	+12	+14	VDC
Current Draw		8.0	9.0	A
Switching Time		1.0	2.0	μS

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)	6.142 x 3.346 x 0.787	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	20 Pin Rectangular	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	M3 Thru Holes	--
Weight	16	oz.
Weight with Heatsink	35	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	+8		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+ 85		°C

**DC / CONTROL PINS**

PIN LABEL	NAME	DESCRIPTION
4	TEMP	Temp Monitor: 0.2V @ -40 degC, 3.3V @ 85 degC
5	I/O	TTL Hi or No Connection = Enable, TTL Lo = Disable
6-9	GND	Ground
17,19,20	+VDC	Supply Voltage - Range Specified in Datasheet

**Configuration Options**

Model Number	Description
TA1203	No Heat Sink Included
TA1203 – HS	Standard Heat Sink
TA1203 – HSF	Heat Sink with Integrated Cooling Fan
TA1203 – HSX	Custom Heat Sink Configuration
TA1203 – DOX	Custom Amplifier Configuration (issued by Triad upon customer request)

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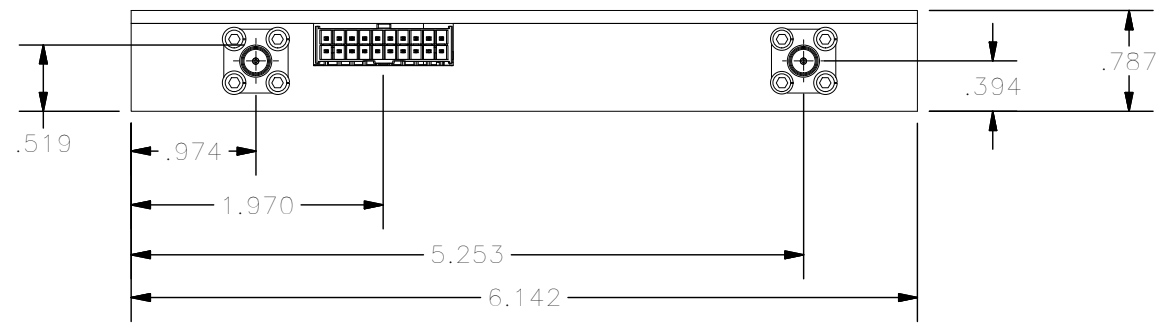
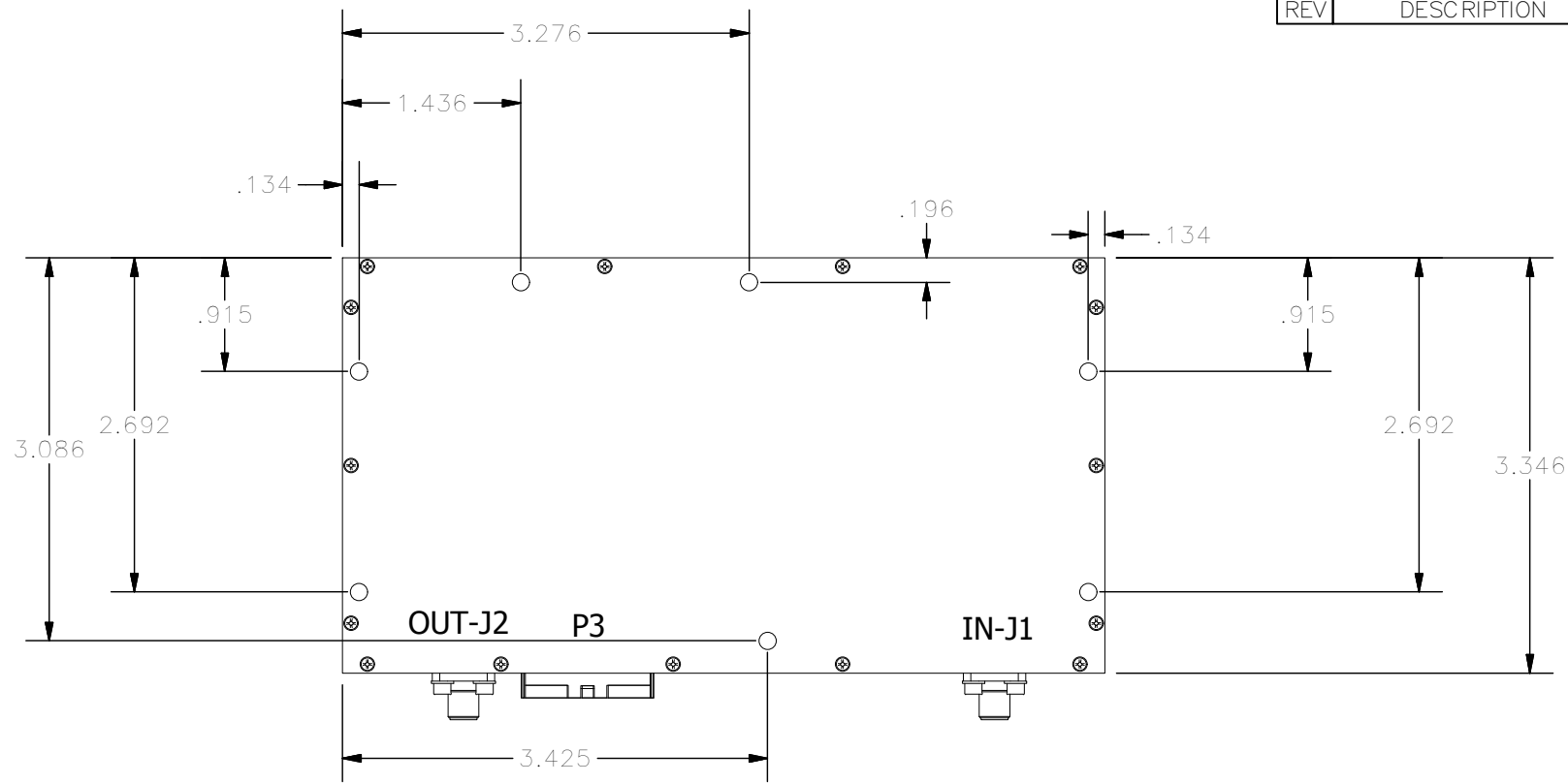
B

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D

E

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



DRAWN	Steph	1/25/2017
DESIGNED	scopp	12/19/2015
CHECKED		
ENG. APPROVED		
MFG. APPROVED		

**TRIAD**  
RF SYSTEMS

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

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

A

B

C

D

E

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2

3

4

1

2

3

4