

## 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

Over / Under / Reverse Voltage Protection  
Temperature Output  
Optional Heatsink

High Speed On/Off Control  
Over Temp Shutdown  
Versatile DC Supply (VDS) +9V to +36V

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	700		6000	MHz
PSat Power Output	+36.0	+40.0		dBm
Gain		43.0		dB
Gain Flatness		1.5	2.0	dB <sup>1</sup>
Input Return Loss	-11	-12		dB
Operating Voltage	+9	+28	+36	VDC
Current Draw		2.0		A
Quiescent Current Draw		0.1		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)	3.75 x 2 x 1.063	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--
Weight	8	oz.
Weight with Heatsink	13	oz.

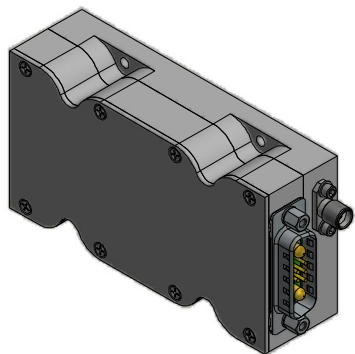
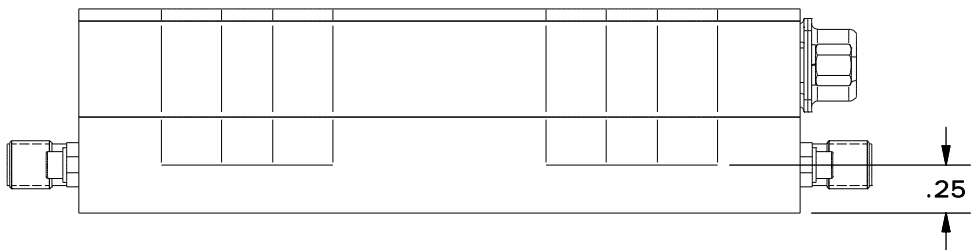
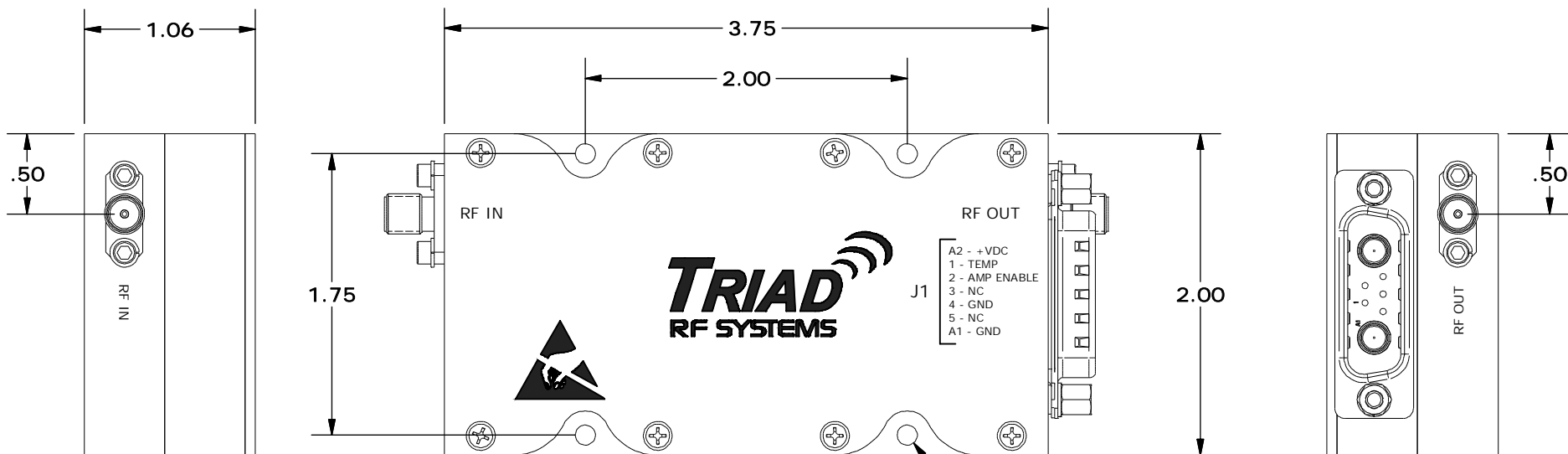
**ENVIRONMENTAL / PROTECTIONS**

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	0		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+ 90		°C

**DC / CONTROL PINS**

PIN LABEL	NAME	DESCRIPTION
A1	GND	Ground
1	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10
2	Amp Enable	TTL On/Off Low=Enable, High=Disable
3	NC	Not Connected
4	GND	Ground
5	NC	Not Connected
A2	+VDC	Supply Voltage - Range Specified in Datasheet

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	2/11/13	DMC
1	ECN E15020	9/9/15	DMC



7W2 DC Connector J1	
PIN	FUNCTION
A1	GND
A2	+VDC
1	Temperature Sensor
2	Amp Enable
3	Not Connected
4	GND
5	Not Connected

DRAWN	DMC	2/11/2013
DESIGNED	DMC	2/27/2013
CHECKED		
ENG APPROVED		
MFG APPROVED		



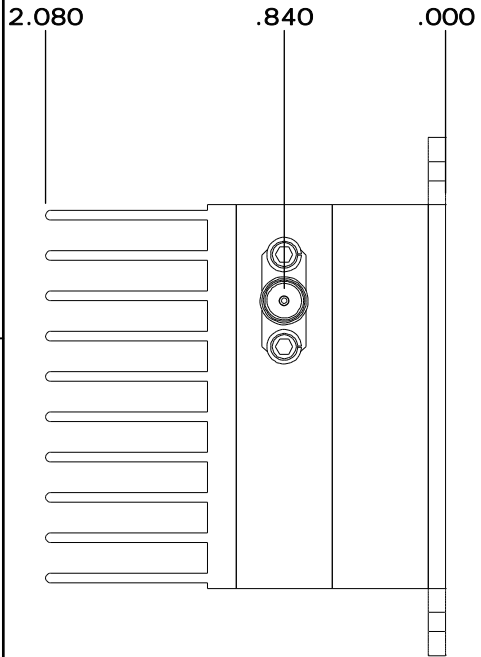
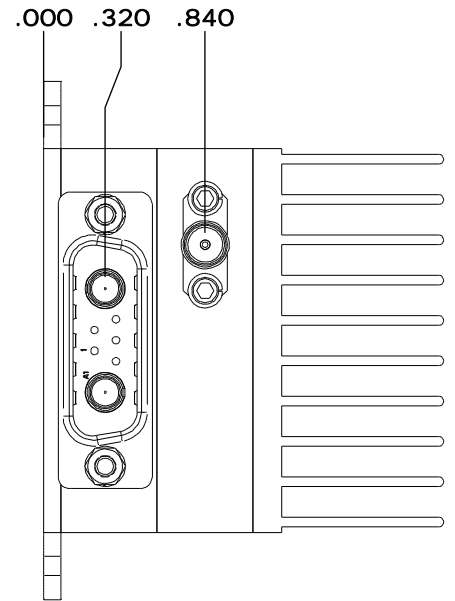
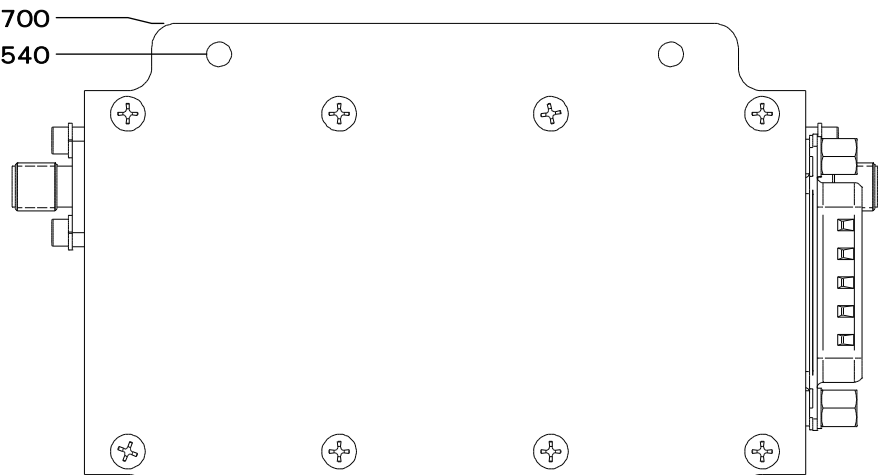
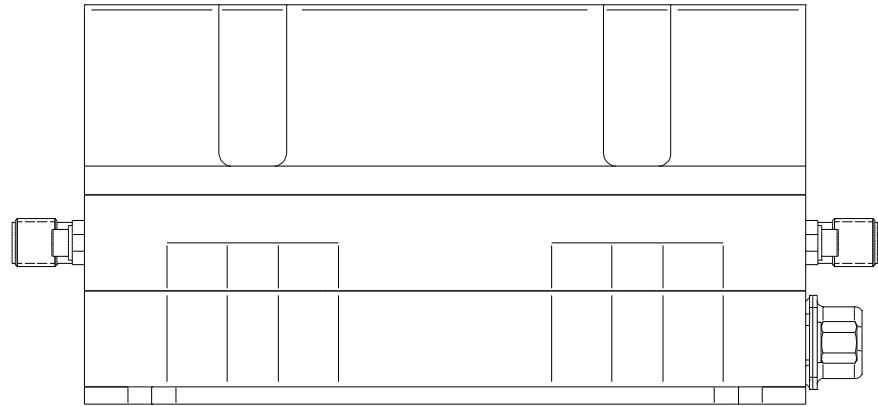
180 TICES LN  
BLDG A STE 107  
EAST BRUNSWICK, NJ 08816  
855- 558- 1001

HOUSING OUTLINE 102

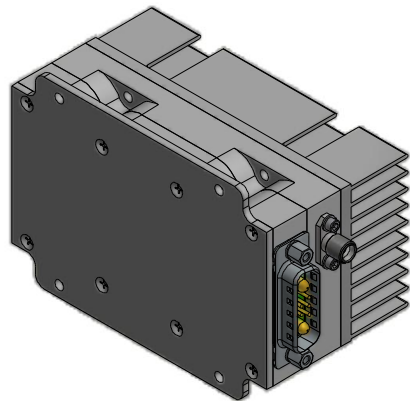
DIMENSIONS ARE IN INCHES  
UNLESS SPECIFIED OTHERWISE  
TOLERANCES  
DECIMALS FRACTIONS ANGLES  
XX ±.01 ±1/32 ±2°  
.XXX ±.005

SIZE	DWG NO.	REV
A	OL_TA1003	1
SCALE: NONE	CAGE CODE 67DZ3	SHEET 1 OF 3

OPTIONAL HEATSINK



2.700  
2.540  
.160  
.000  
.000 .700 3.050  $\phi$ .129 (4x)



DRAWN	DMC	2/11/2013
DESIGNED	DMC	2/27/2013
CHECKED		
ENG APPROVED		
MFG APPROVED		

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

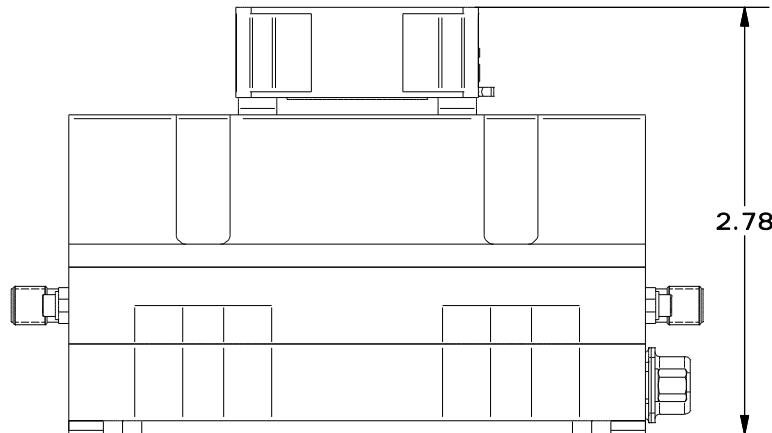


180 TICES LN  
BLDG A STE 107  
EAST BRUNSWICK, NJ 08816  
855- 558- 1001

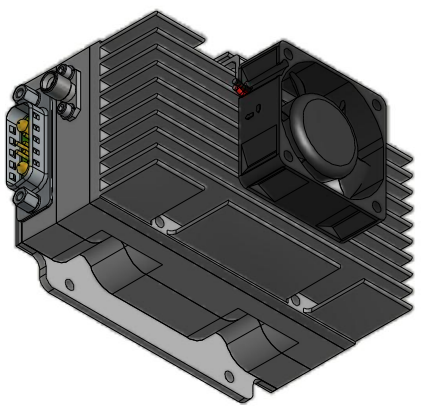
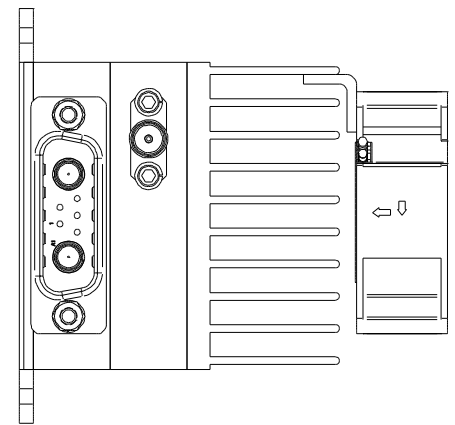
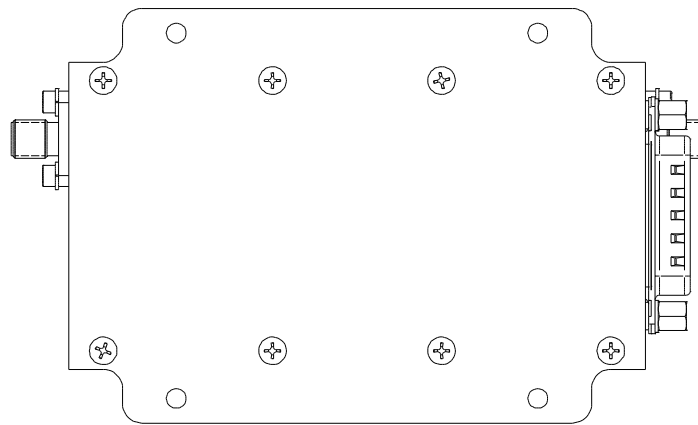
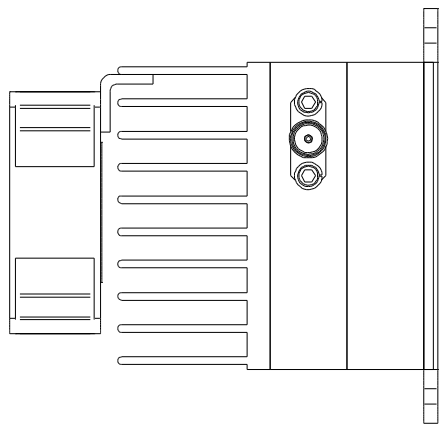
HOUSING OUTLINE 102

SIZE A	DWG NO. OL_TA1003	REV 1
SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 3

OPTIONAL HEATSINK  
WITH COOLING FAN



2.78



DRAWN	DMC	2/11/2013
DESIGNED	DMC	2/27/2013
CHECKED		
ENG APPROVED		
MFG APPROVED		

**TRIAD**  
RF SYSTEMS

180 TICES LN  
BLDG A STE 107  
EAST BRUNSWICK, NJ 08816  
855- 558- 1001

HOUSING OUTLINE 102

DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE		SIZE	DWG NO.	REV
DECIMALS	FRACTIONS	A	OL_TA1003	1
XXX ±.01	± 1/32	SCALE: NONE	CAGE CODE 67DZ3	SHEET 3 OF 3
.XXX ±.005	± 2°			

