

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	Thermal Shutdown
Forward Power Measurement	Temp. Monitor Output
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	1900		2000	MHz
P1dB Power Output	+41.0	+43.0		dBm
P _{SAT}				dBm
Gain	49.0	50.0		dB
Gain Flatness		1.0		dB ¹
Linear Power Output		36.0		dBm
Input Return Loss	-16	-20		dB
Operating Voltage	+11	+12	+13	VDC
Current Draw		5.5	6.0	A
Quiescent Current Draw		6.0		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 x 3.5 x 0.693	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	6-32 Thru Holes	--
Weight	14	oz.
Weight with Heatsink	24	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	-50		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	FWD	Forward Power Detection
A2	+VDC	Supply Voltage - Range Specified in Datasheet

1

2

3

4

5

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	8/2/12	DMC
1	ECN# 12- 001	9/5/12	DMC

A

A

B

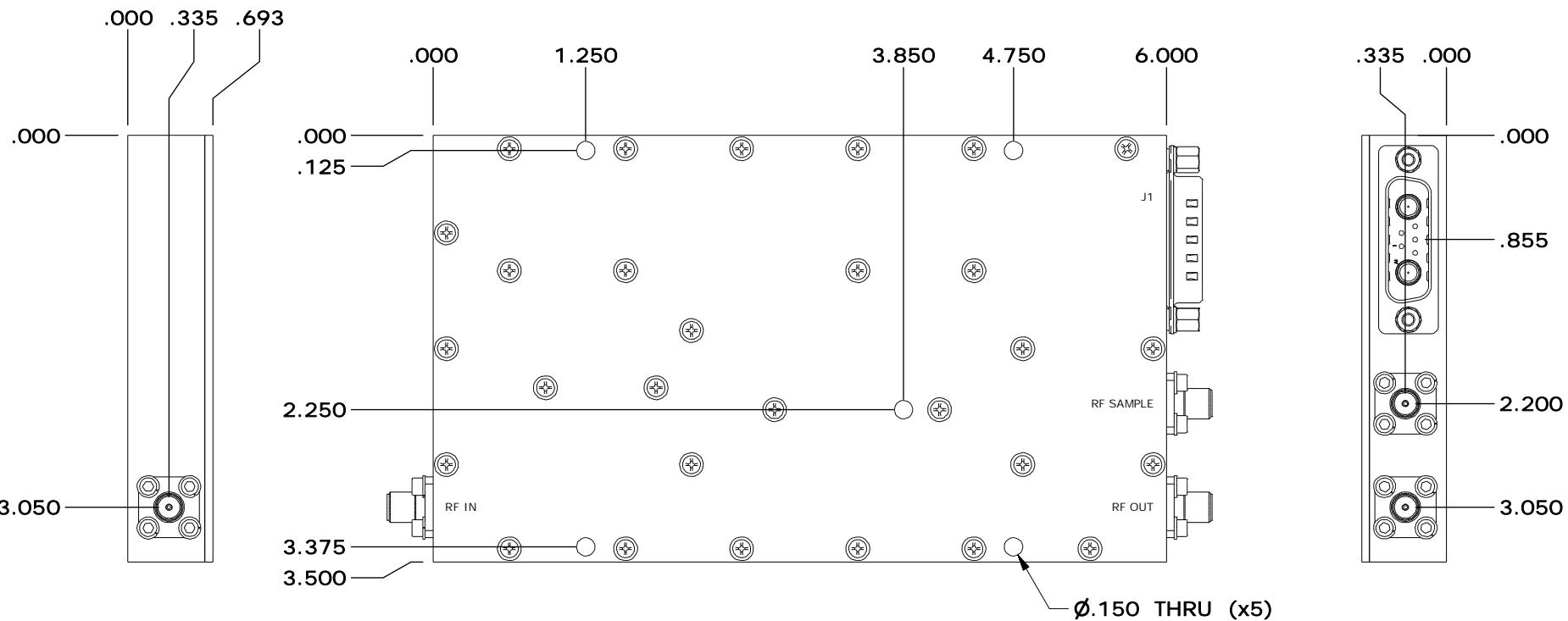
B

C

C

D

D



DRAWN DMC 8/2/2012

DESIGNED DMC 6/27/2012

CHECKED DMC 9/5/2012

ENG APPROVED

MFG APPROVED

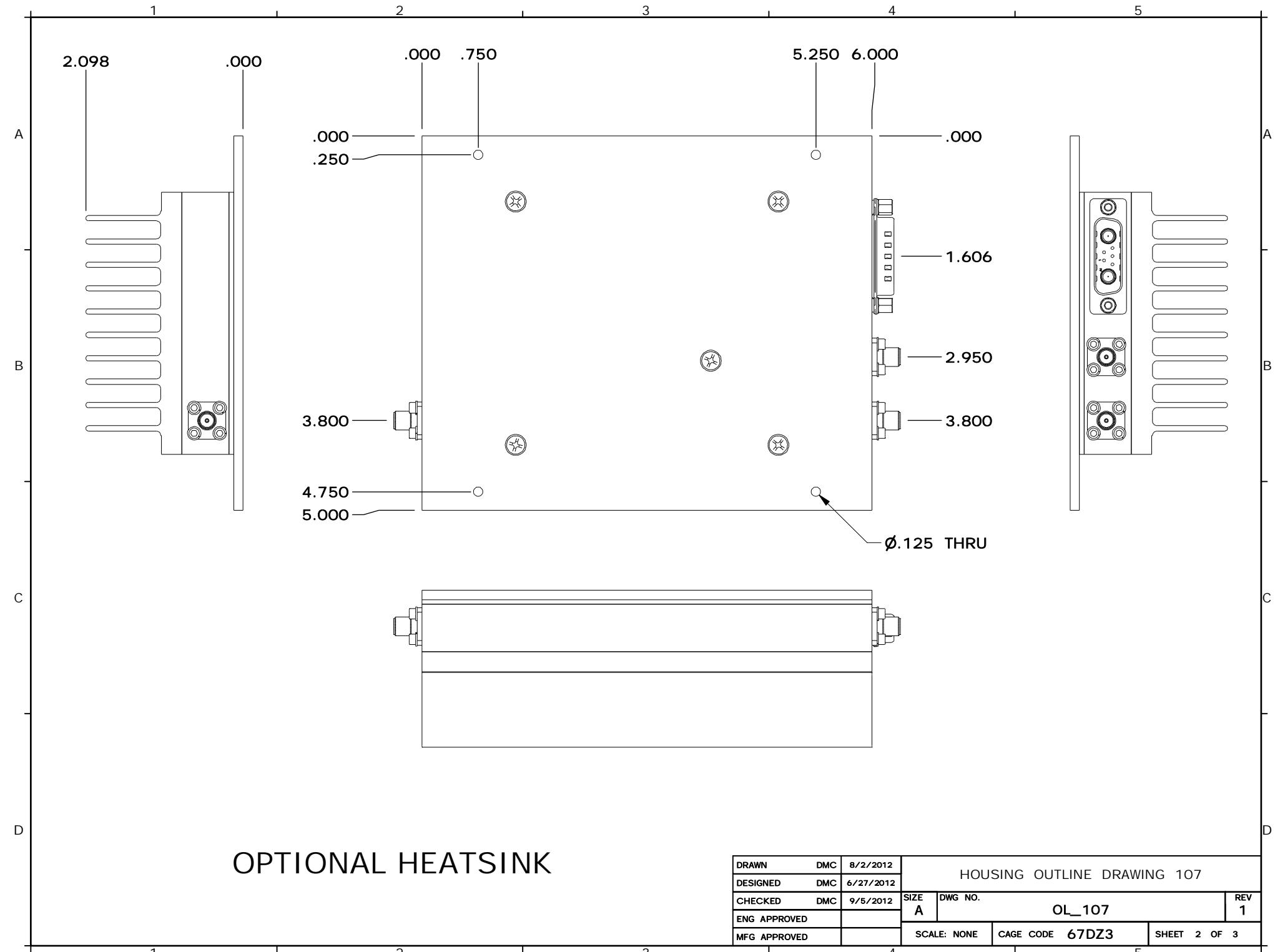
TRIAD
RF SYSTEMS

180 TICES LANE
BUILDING A, SUITE 107
NORTH BRUNSWICK, NJ 08816
855- 558- 1001

HOUSING OUTLINE DRAWING 107

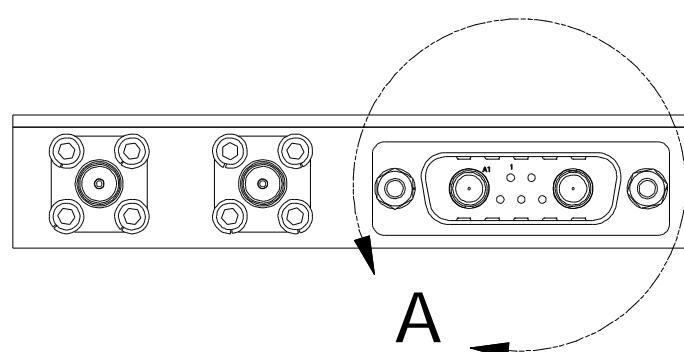
DIMENSIONS ARE IN INCHES
UNLESS SPECIFIED OTHERWISE
DECIMALS FRACTIONS ANGLES
 $XX \pm .01$ $\pm 1/32$ $\pm 2^\circ$
 $XXX \pm .005$

SIZE DWG NO. REV
A OL_107 1
SCALE: NONE CAGE CODE 67DZ3 SHEET 1 OF 3

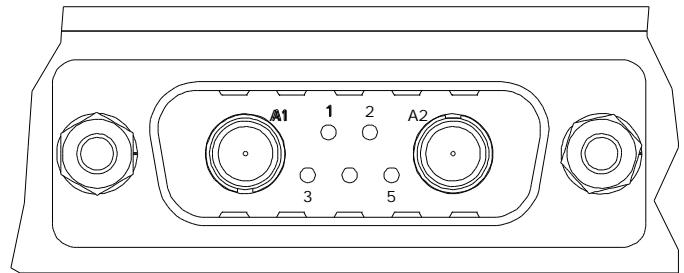


1 2 3 4 5

A



B



C

DETAIL A

DC Connector J1	
PIN	FUNCTION
A1	GND
A2	+VDC
1	Temperature Sensor
2	Amp Enable
3	See data sheet
4	GND
5	FWD Detector

DRAWN	DMC	8/2/2012	HOUSING OUTLINE DRAWING 107			
DESIGNED	DMC	6/27/2012				
CHECKED	DMC	9/5/2012	SIZE	DWG NO.	OL_107	
ENG APPROVED						
MFG APPROVED			SCALE: NONE	CAGE CODE	67DZ3	REV 1

1 2 3 4 5