

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
 Reflected Power Measurement
 Temperature Output

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	4400		5000	MHz
P1dB Power Output	+39.0	+41.0		dBm
Gain	41.0	42.0		dB
Gain Flatness		1.5		dB ¹
Linear Power Output COFDM		34.0		dBm
Input Return Loss	-11			dB
Operating Voltage	+11	+12	+13	VDC
Current Draw		6.0		A
Quiescent Current Draw		4.0		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	Circular Locking	--
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
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	+2		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+ 90		°C

DC / CONTROL PINS

PIN LABEL	NAME	DESCRIPTION
1	GND	Ground
2	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10
3	Amp Enable	TTL On/Off Low=Enable, High=Disable
4	FWD	Forward Power Detection
5	REV	Reverse Power Detection
6	+VDC	Supply Voltage - Range Specified in Datasheet

A

B

C

D

E

REVISIONS

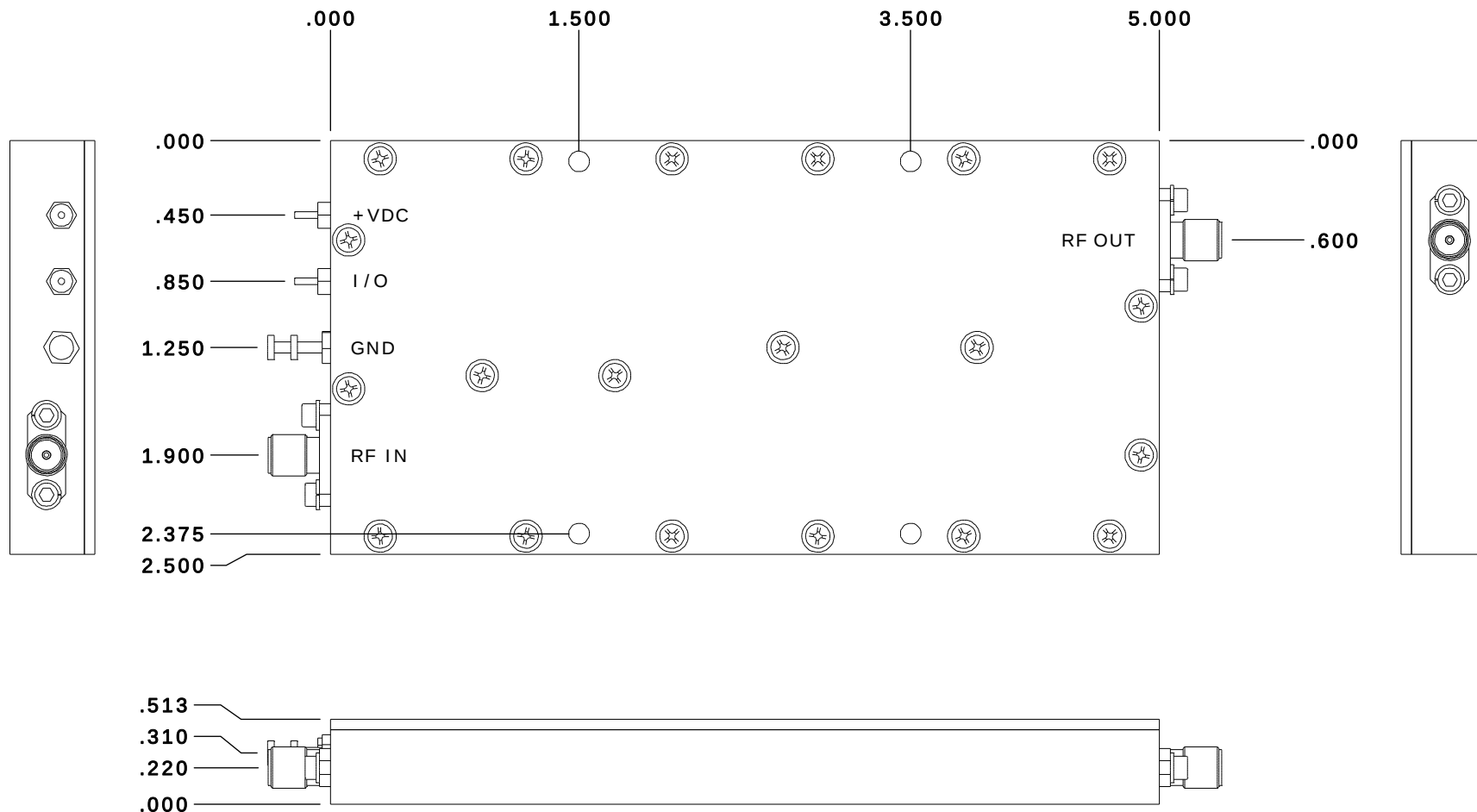
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	7 / 25 / 14	DMC

1

2

3

4



DRAWN	DMC	5 / 27 / 2015
DESIGNED	DMC	5 / 11 / 2012
CHECKED		
ENG APPROVED		
MFG APPROVED		

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



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HOUSING OUTLINE DRAWING 101

SIZE	DWG NO.	REV
A	OL_101	0
SCALE: NONE	CAGE CODE 67DZ3	SHEET 1 OF 3

A

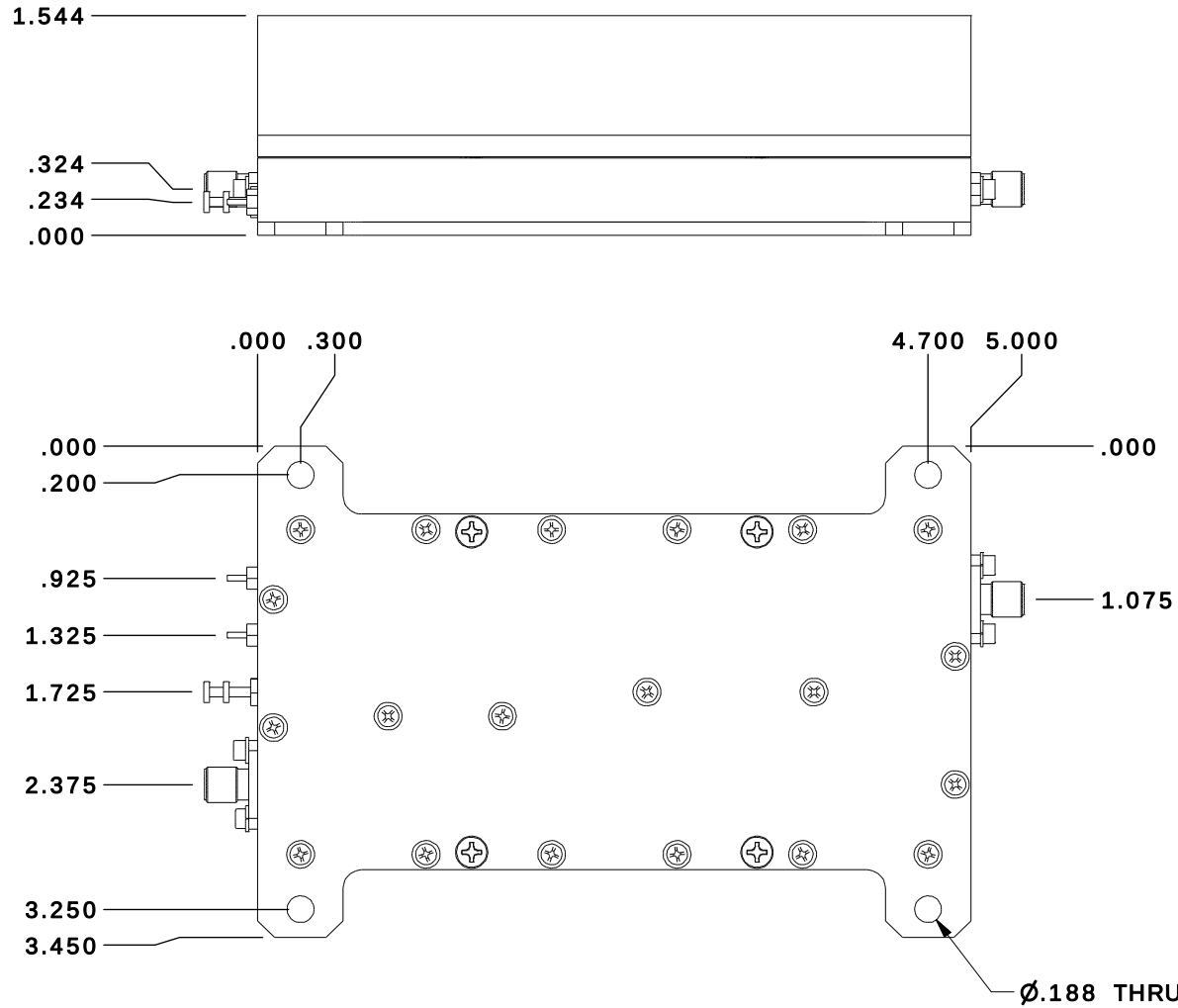
B

C

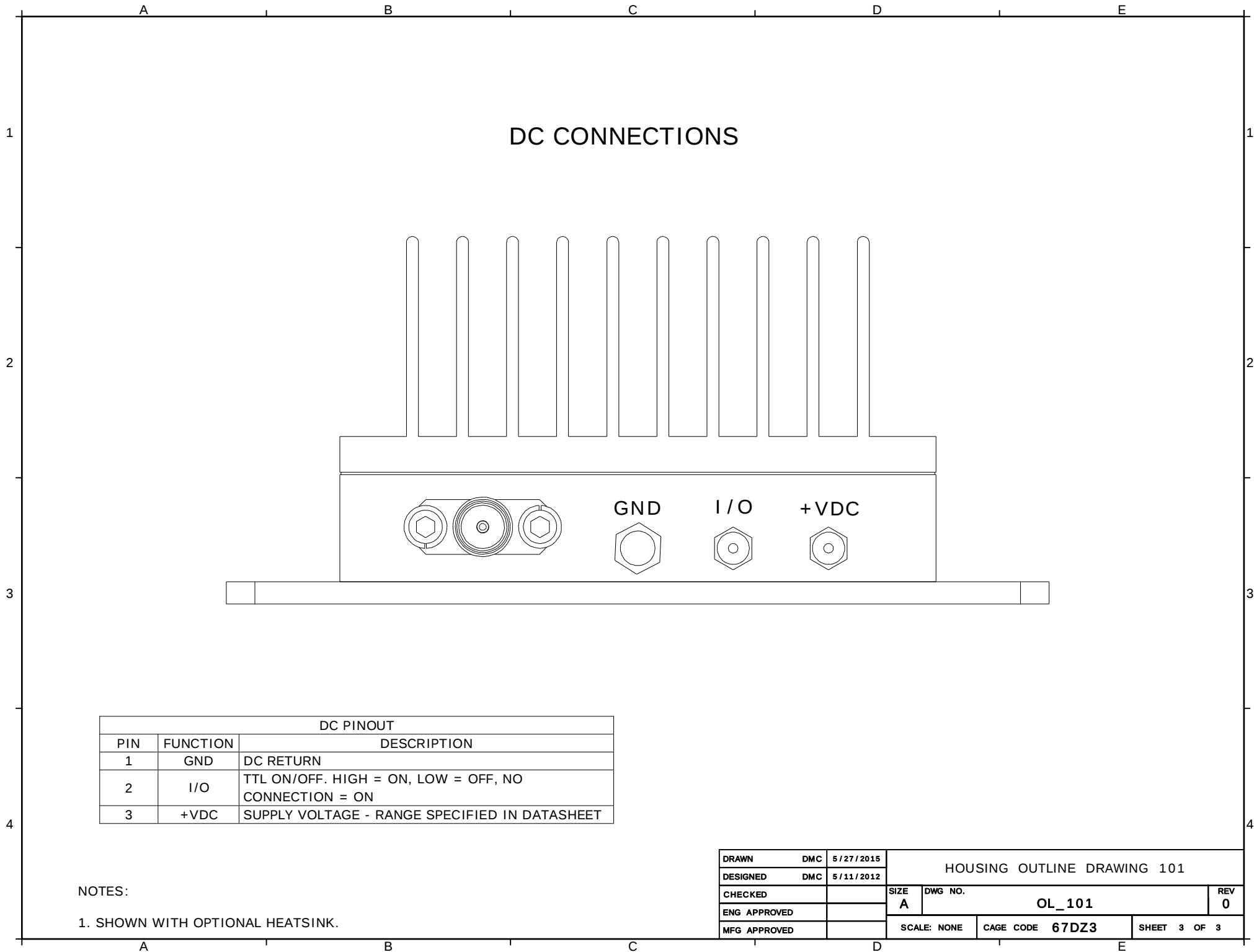
D

E

OPTIONAL HEATSINK



DRAWN	DMC	5 / 27 / 2015	HOUSING OUTLINE DRAWING 101		
DESIGNED	DMC	5 / 11 / 2012			
CHECKED			SIZE	DWG NO.	REV
ENG APPROVED			A	OL_101	0
MFG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 3



DC CONNECTIONS

DC PINOUT		
PIN	FUNCTION	DESCRIPTION
1	GND	DC RETURN
2	I/O	TTL ON/OFF. HIGH = ON, LOW = OFF, NO CONNECTION = ON
3	+VDC	SUPPLY VOLTAGE - RANGE SPECIFIED IN DATASHEET

NOTES:
1. SHOWN WITH OPTIONAL HEATSINK.

DRAWN	DMC	5/27/2015	HOUSING OUTLINE DRAWING 101		
DESIGNED	DMC	5/11/2012			
CHECKED			SIZE	DWG NO.	REV
ENG APPROVED			A	OL_101	0
MFG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 3 OF 3