

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
- Optional Heatsink
- High Speed On/Off Control

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	1400		1600	MHz
PSat Power Output		+46.0		dBm
Gain	19.0	20.0		dB
Gain Flatness		0.5	1.0	dB ¹
Input Return Loss	-16	-17		dB
Operating Voltage	+10	+12	+28	VDC
Current Draw		2.0	4.0	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)	4.93 x 2.53 x 0.7	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	15 Pin Micro-D	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--
Weight	4	oz.
Weight with Heatsink	7	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		--
PA Baseplate Shutoff Temperature	+ 85		°C

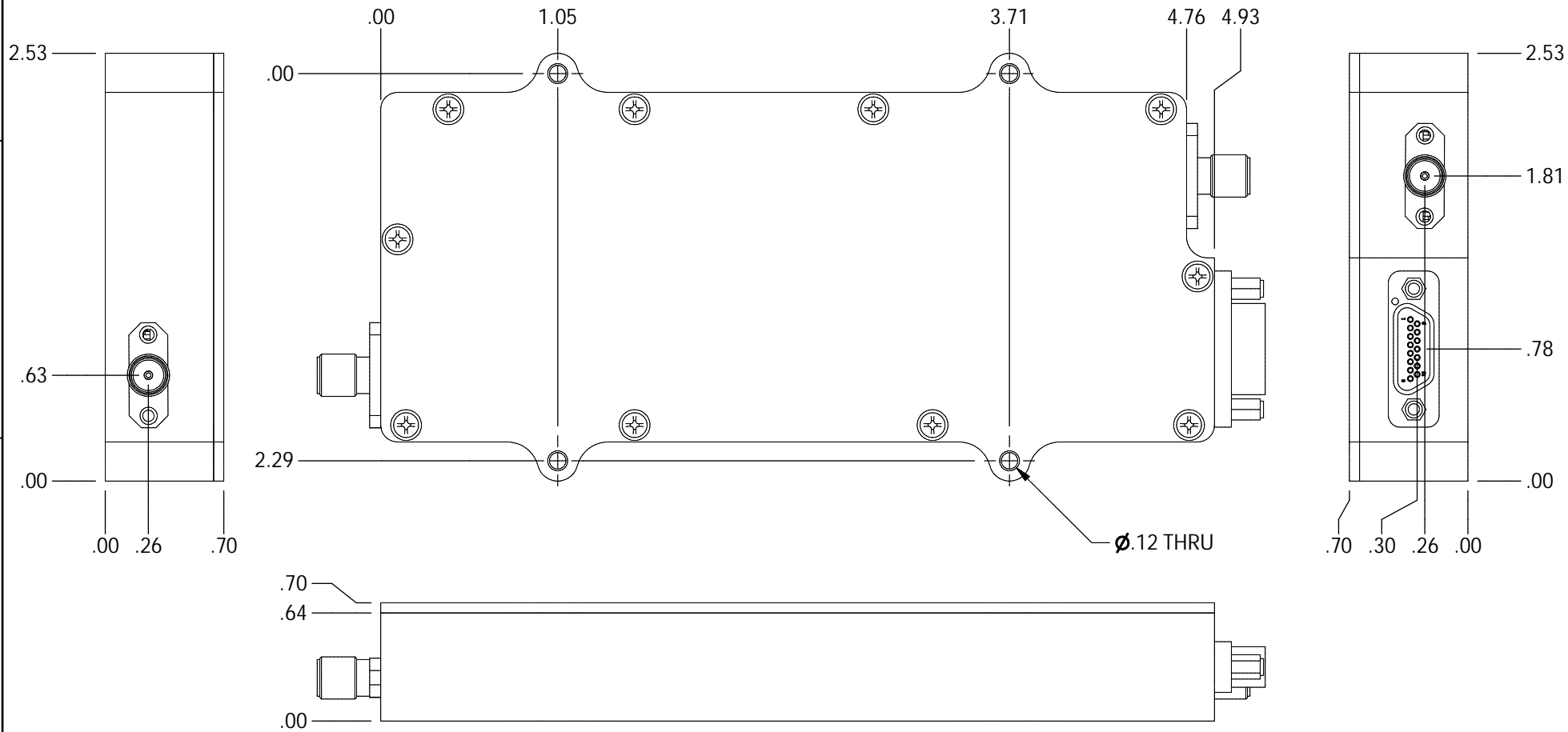
INPUT/OUTPUT PINS

AMPLIFIER CONNECTOR TYPE:		15 PIN MICRO-D FEMALE
TRIAD CABLE PART NUMBER:		CBL57
PIN NUMBER	LABEL	DESCRIPTION
2,3,10,11	+VDC	Supply Voltage - Range Specified in Datasheet
1,7,9,12	GND	Ground
14	N/C	No Connection
8	SIG GND	Signal Ground
13	Amp Enable	TTL Hi or No Connection = Enable, TTL Lo = Disable
4	N/C	No Connection
6	N/C	No Connection

Configuration Options

Model Number	Description
TA1014	No Heat Sink Included
TA1014 – HS	Standard Heat Sink
TA1014 – HSF	Heat Sink with Integrated Cooling Fan
TA1014 – HSX	Custom Heat Sink Configuration
TA1014 – DOX	Custom Amplifier Configuration (issued by Triad upon customer request)

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	8/24/15	DH
1	E18318	5/31/18	SC



DRAWN	Dean	9/24/2015
DESIGNED	DMC	8/2/2016
CHECKED		
ENG APPROVED		
MFG APPROVED		

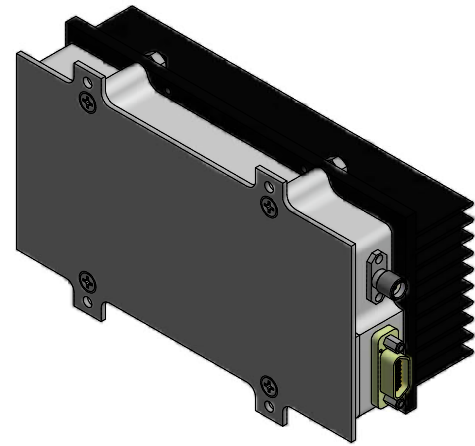
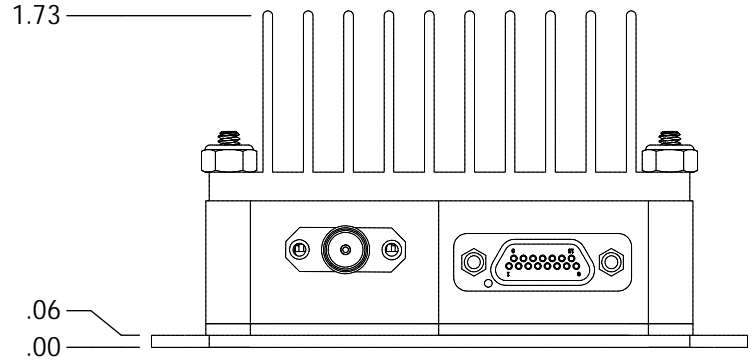
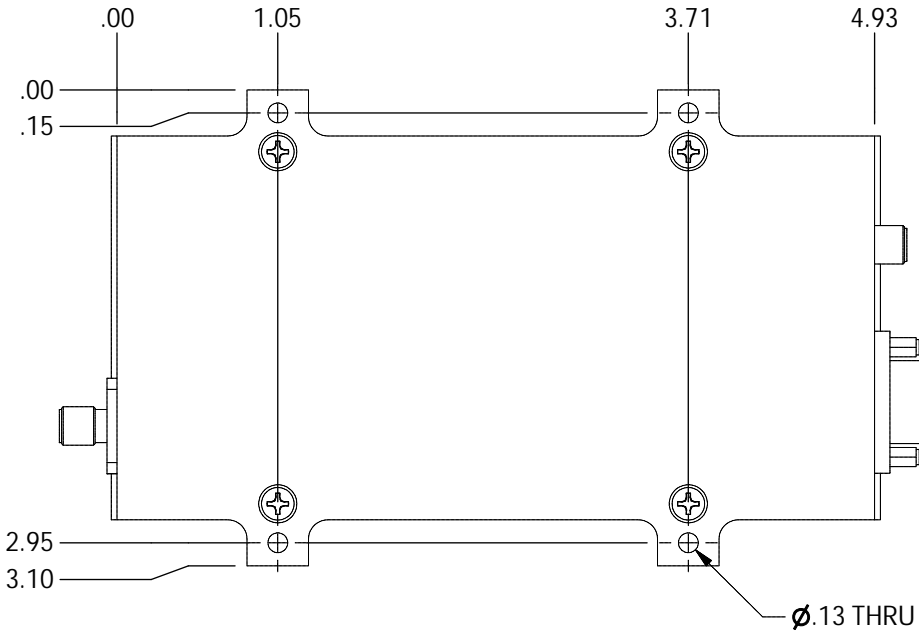
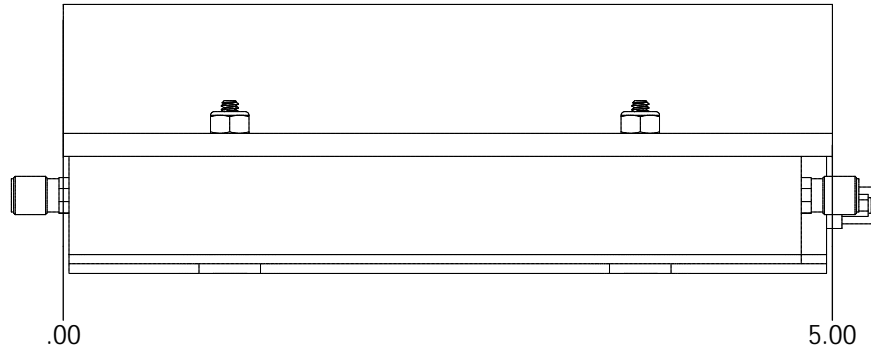


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HOUSING OUTLINE DRAWING 155

DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE TOLERANCES		SIZE	DWG NO.	REV
DECIMALS	FRACTIONS	ANGLES	A	1
XX ±.01	± 1/32	± 2°	OL_155	
.XXX ±.005			SCALE: NONE	CAGE CODE 67DZ3
			SHEET 1 OF 2	

HEATSINK



DRAWN	Dean	9/24/2015	HOUSING OUTLINE DRAWING 155		
DESIGNED	DMC	8/2/2016	SIZE	DWG NO.	REV
CHECKED			A	OL_155	1
ENG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 2
MFG APPROVED					