

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 at +25°C in a 50Ω system

RF / ELECTRICAL				
PARAMETER	MIN	TYP	MAX	UNIT
Operating Frequency	2500		2700	MHz
P1dB Power Output	+46.0	+47.0		dBm
Gain	46.0	47.0		dB
Gain Flatness		1.0	1.5	dB
Linear Power		+40.0		dBm
Linear Power Test Conditions	W-CDMA @ -55 dBc ACPR			--
Input Return Loss	-16	-18		dB
Operating Voltage	+11		+13	VDC
Current Draw		14.0	15.0	A
Quiescent Current Draw		14.0		A
Switching Time		1.0	2.0	uS

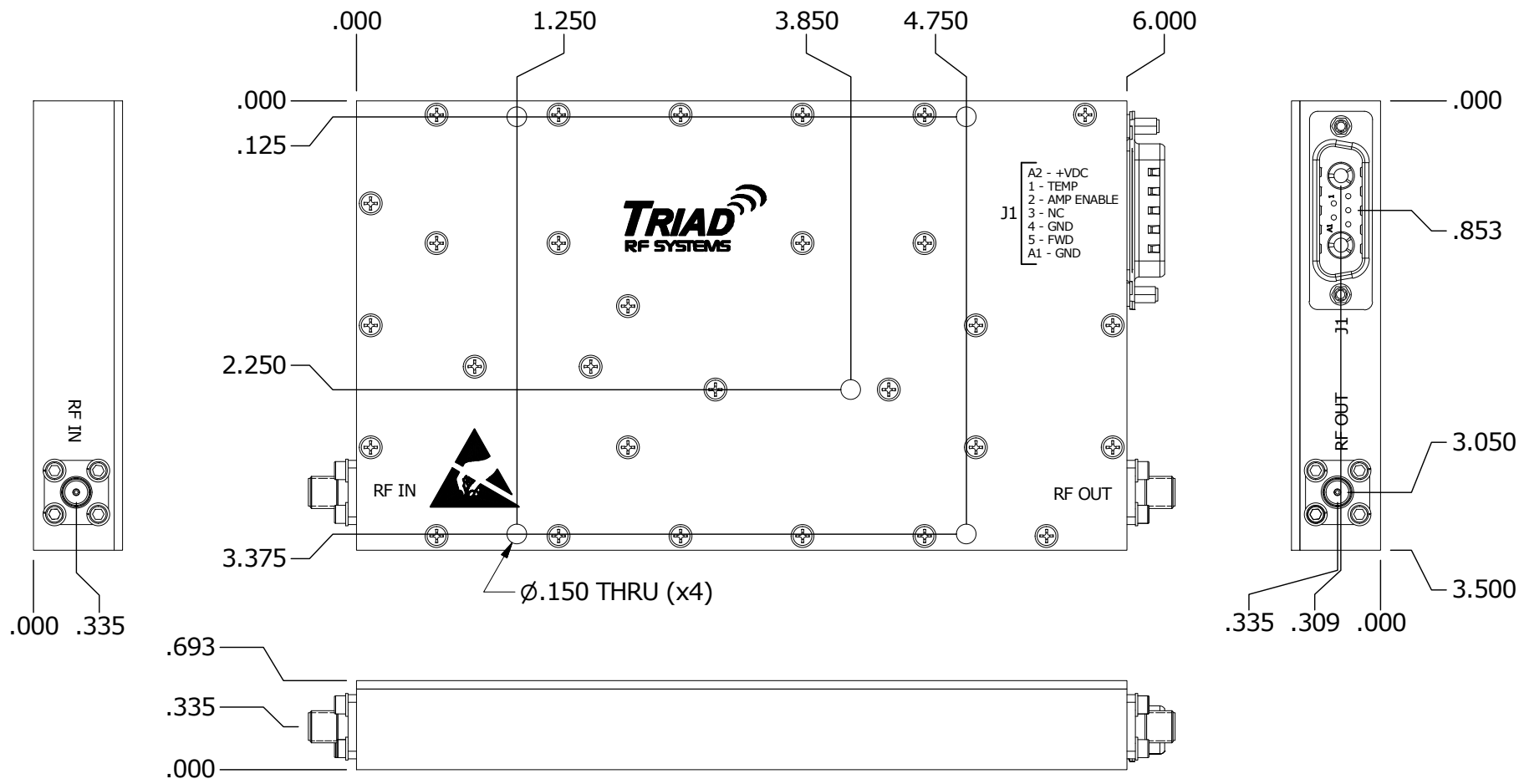
MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	6 x 3.5 x 0.693	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--
Weight	14	oz
Weight with heatsink	24	oz

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	+3.0		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

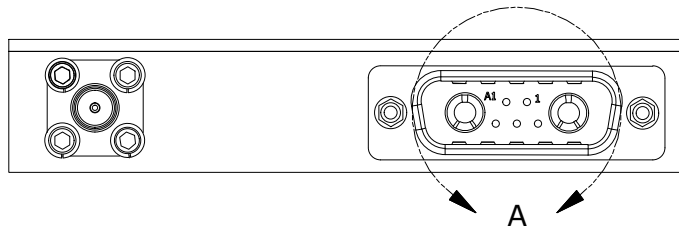
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	08/15/2014	DMC

1
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4

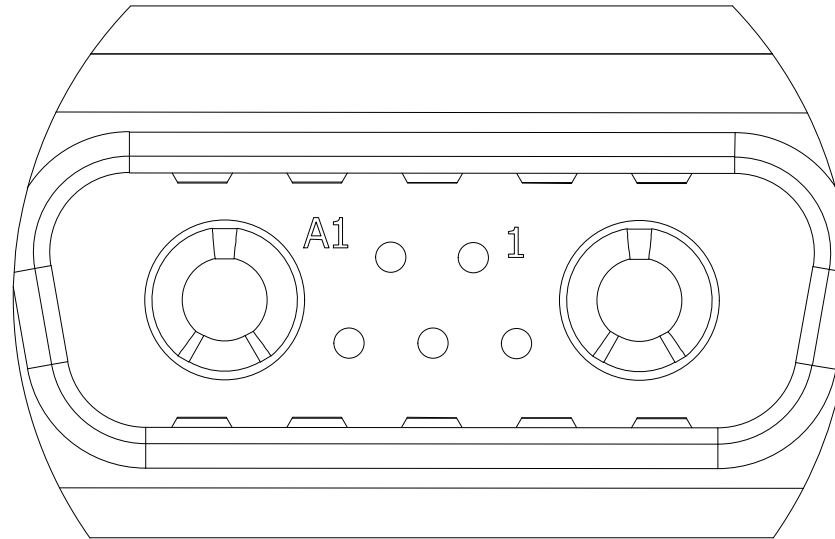


DRAWN	AHA	7/9/2014	 180 TICES LANE BUILDING A, SUITE 107 EAST BRUNSWICK, NJ 08816 855-558-1001	
DESIGNED	DMC	10/6/2013		
CHECKED	BG	7/9/2014		
ENG. APPROVED				
MFG. APPROVED				
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE TOLERANCES DECIMALS .XX ±.01 FRACTIONS ± 1/32 ANGLES ± 2°			Housing Outline 107	
SIZE	A	DWG NO.	REV 0	
SCALE: NONE	CAGE CODE 67DZ3		SHEET 1 OF 3	

A B C D E



DETAIL A



CONNECTOR PINOUT

PIN	FUNCTION	NOTES
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 Measurement
A1	GND	Ground
A2	+VDC	Supply Voltage - Range Specified in Datasheet

NOTES:

1. P/N OF CONNECTOR ON AMPLIFIER: CONNEC 3007W2PCM99A10X
2. EXACT PINOUT MAY VARY WITH MODEL AND CUSTOMER SPECIFICATIONS

DRAWN	AHA	7/9/2014	Housing Outline 107		
DESIGNED	DMC	10/6/2013			
CHECKED	BG	7/9/2014	SIZE	DWG NO.	REV
ENG. APPROVED			A		0
MFG. APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 3

A

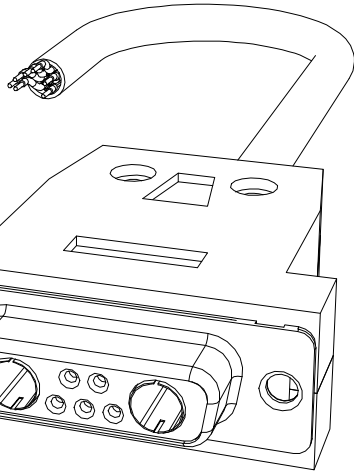
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C

D

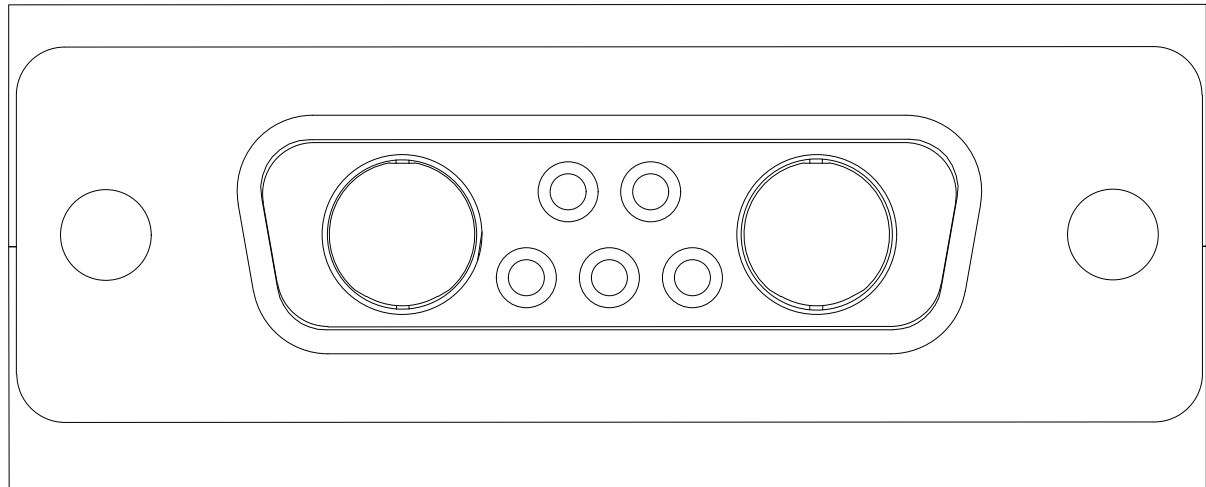
E

1



MATE CABLE

2



3007W2SCM99A10X

3

NOTES:

1. P/N OF MATING CONNECTOR REQUIRED: CONNEC 3007W2SCM99A10X OR EQUIVALENT
2. P/N OF BACKSHELL/HOOD: EMERSON NETWORK POWER CON AIM - CAIMBRIDGE 40-9715H
3. TRIAD CABLE P/N: C12080301
4. WIRE DIAMETER: 24 AWG

4

DRAWN	AHA	7/9/2014	Housing Outline 107		
DESIGNED	---	6/4/2014			
CHECKED	BG	7/9/2014	SIZE A	DWG NO.	REV 0
ENG. APPROVED					
MFG. APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 3 OF 3

A

B

C

D

E