

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
Forward Power Measurement
High Speed On/Off Control
Optional Heatsink

Thermal Shutdown
High Speed On/Off Control
Temp. Monitor Output

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	2000		2300	MHz
P1dB Power Output	+41.0	+42.0		dBm
Gain	44.0	45.0		dB
Gain Flatness		1.0		dB ¹
Linear Power Output		35.0		dBm
Input Return Loss		-18		dB
Operating Voltage	+ 9	+12	+36	VDC
Current Draw		6.0	7.0	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

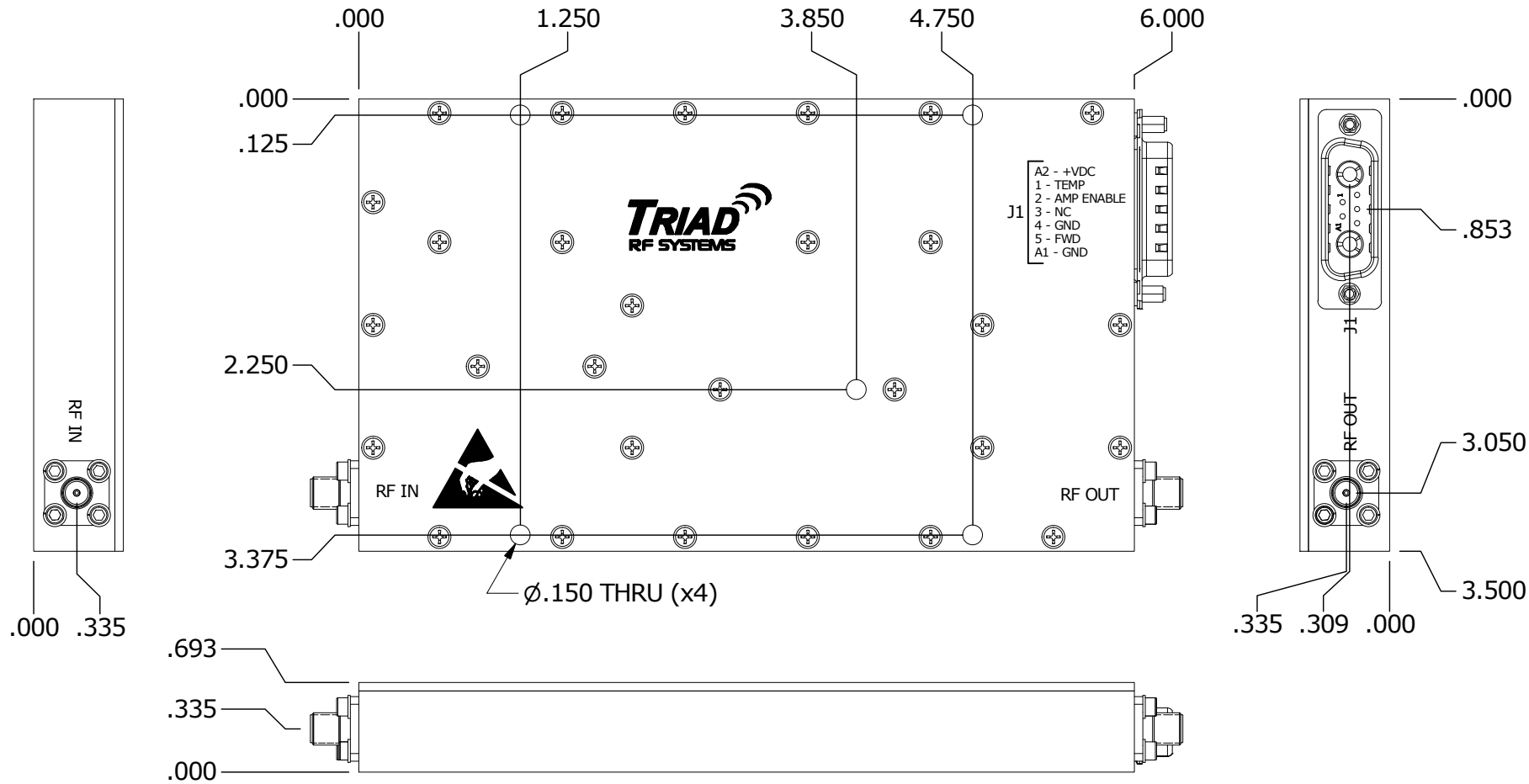
PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Storage Temp Range	-60	+100	°C
Humidity Range	0-100		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	0		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+ 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	FWD	Forward Power Detection
A2	+VDC	Supply Voltage - Range Specified in Datasheet

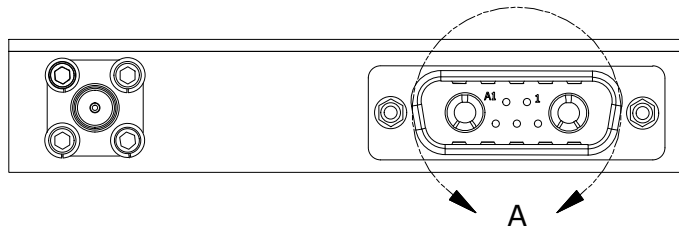
REVISONS			
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	08/15/2014	DMC

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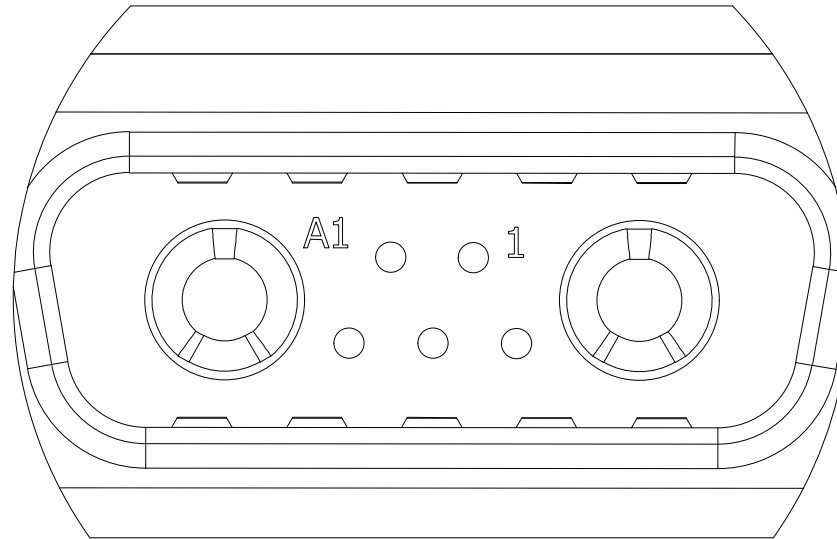


DRAWN	AHA	7/9/2014	 180 TICES LANE BUILDING A, SUITE 107 EAST BRUNSWICK, NJ 08816 855-558-1001	
DESIGNED	DMC	10/6/2013		
CHECKED	BG	7/9/2014		
ENG. APPROVED				
MFG. APPROVED				
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE TOLERANCES DECIMALS .XX ±.01 FRACTIONS 1/32 ANGLES ±2°			Housing Outline 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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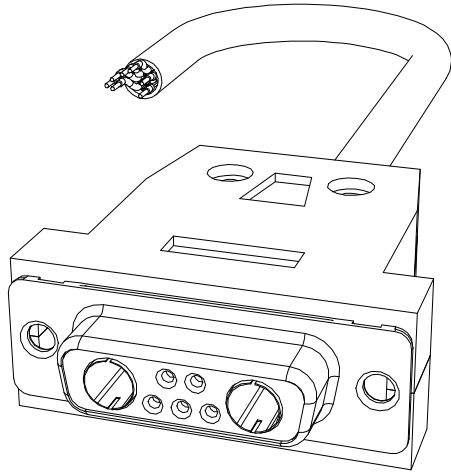
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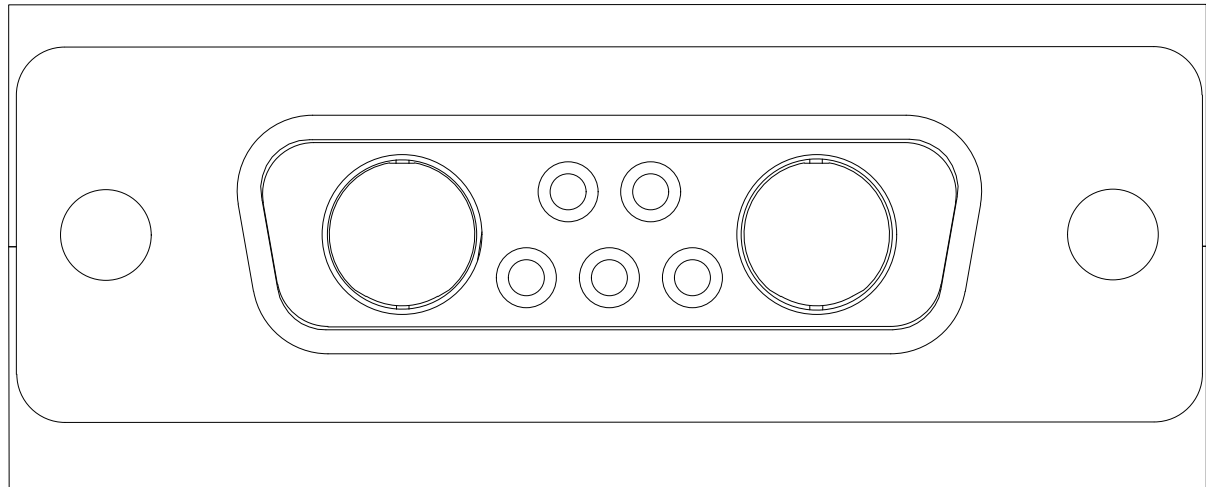
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MATE CABLE



3007W2SCM99A10X

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

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	

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