

DESCRIPTION

This class AB LDMOS 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

- Optional Heatsink

Forward Power Measurement

High Speed On/Off Control
- Over / Under / Reverse Voltage Protection

Reflected Power Measurement

RF Sample Port

Specifications subject to change without notice. Typical performance at +30VDC at +25°C in a 50Ω system

RF / ELECTRICAL				
PARAMETER	MIN	TYP	MAX	UNIT
Operating Frequency	2200		2700	MHz
PSat Power Output	+47.0	+49.0		dBm
Gain		50.0		dB
Gain Flatness		1.5	2.0	dB
Linear Power		+40.0		dBm
Linear Power Test Conditions	16QAM COFM -40dBc			--
Input Return Loss	-16	-18		dB
Operating Voltage	+28		+32	VDC
Current Draw		11.0		A
Quiescent Current Draw		2.2		A
Switching Time		1.0	2.0	uS

MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	7.7 x 6.7 x 0.985	in
RF Connectors (Input / Output)	SMA-F / N-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	6 Thru	--
Weight	48	oz
Weight with heatsink	96	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	+2.0		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	REV	Reverse Power Detection
4	GND	Ground
5	FWD	Forward Power Detection
A2	+VDC	Supply Voltage - Range Specified in Datasheet

A

B

C

D

E

REVISIONS

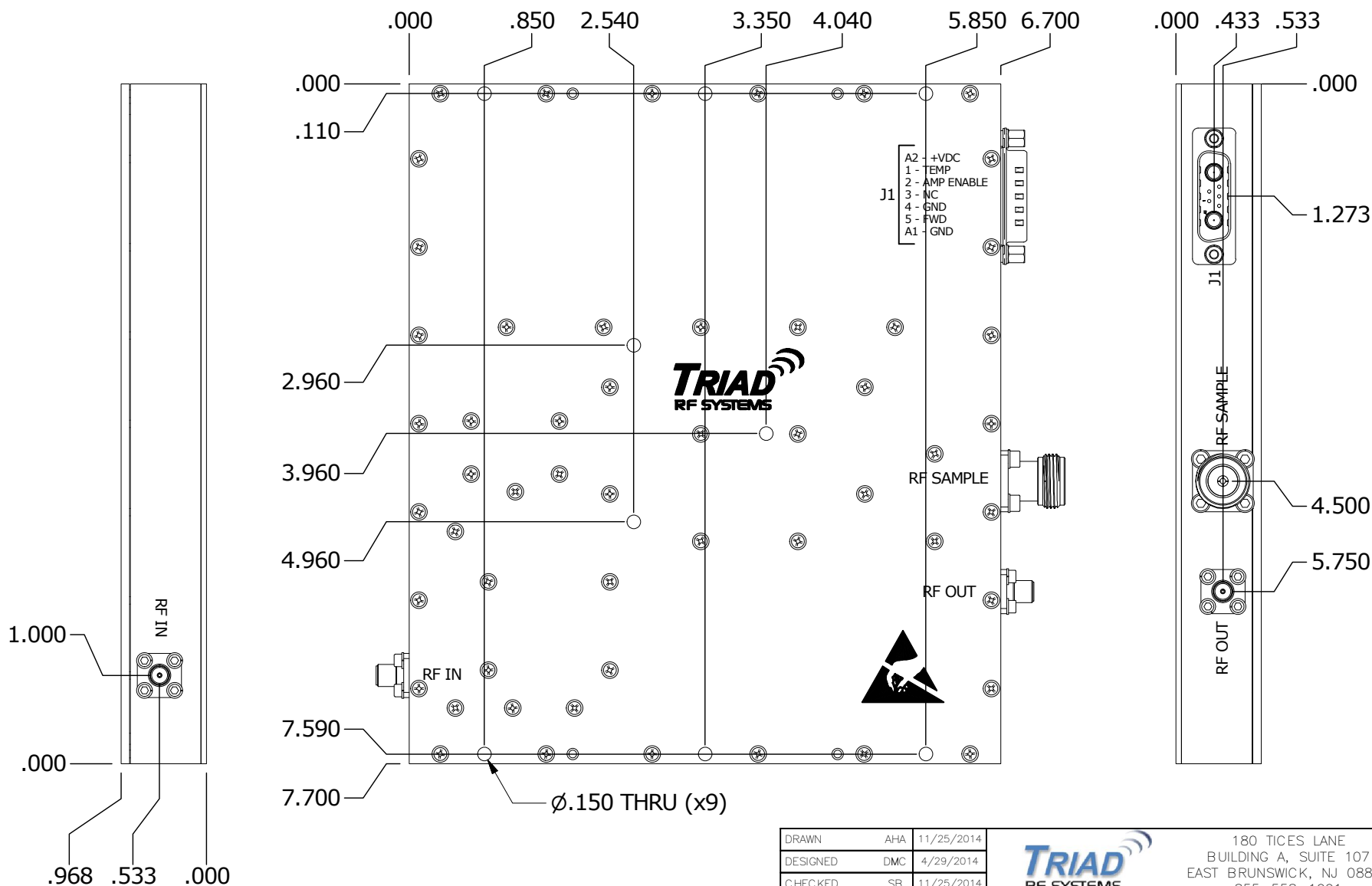
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	12/04/2014	DMC

1

2

3

4



DRAWN	AHA	11/25/2014
DESIGNED	DMC	4/29/2014
CHECKED	SB	11/25/2014
ENG. APPROVED		
MFG. APPROVED		

DIMENSIONS ARE IN INCHES
UNLESS SPECIFIED OTHERWISE

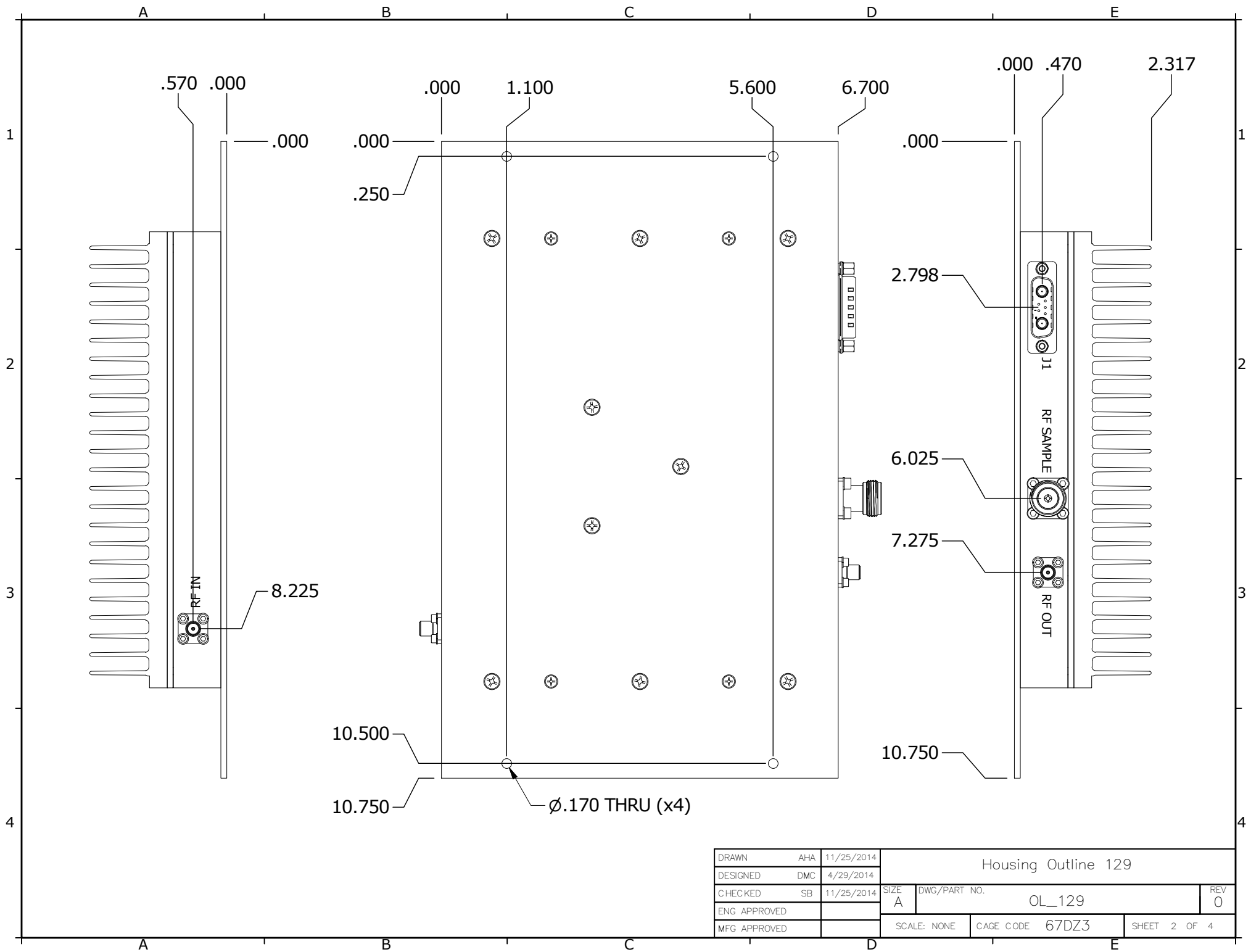
TOLERANCES	DECIMALS	FRACTIONS	ANGLES
	.XX ±.01	± 1/32	± 2°
	.XXX ±.005		



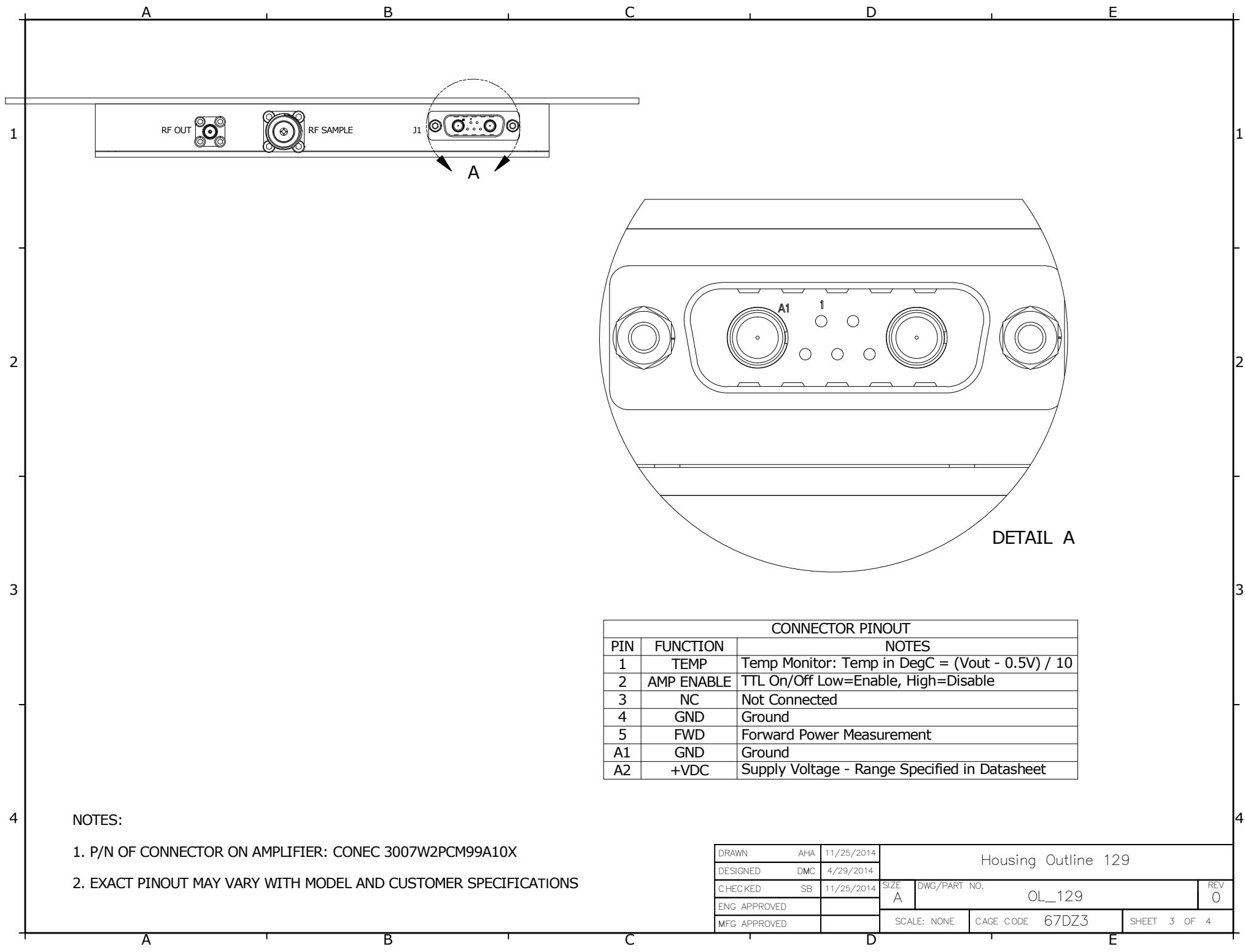
180 TICES LANE
BUILDING A, SUITE 107
EAST BRUNSWICK, NJ 08816
855-558-1001

Housing Outline 129

SIZE	DWG/PART NO.	REV
A	OL_129	0
SCALE: NONE	CAGE CODE 67DZ3	SHEET 1 OF 4



DRAWN	AHA	11/25/2014	Housing Outline 129		
DESIGNED	DMC	4/29/2014			
CHECKED	SB	11/25/2014	SIZE A	DWG/PART NO. OL_129	REV 0
ENG. APPROVED					
MFG. APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 4



NOTES:

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

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

DRAWN	AHA	11/25/2014	Housing Outline 129		
DESIGNED	DMC	4/29/2014			
CHECKED	SB	11/25/2014	SIZE A	DWG/PART NO. OL_129	REV 0
ENG. APPROVED					
MFG. APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 3 OF 4

A

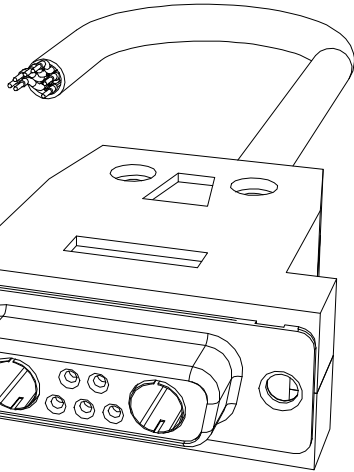
B

C

D

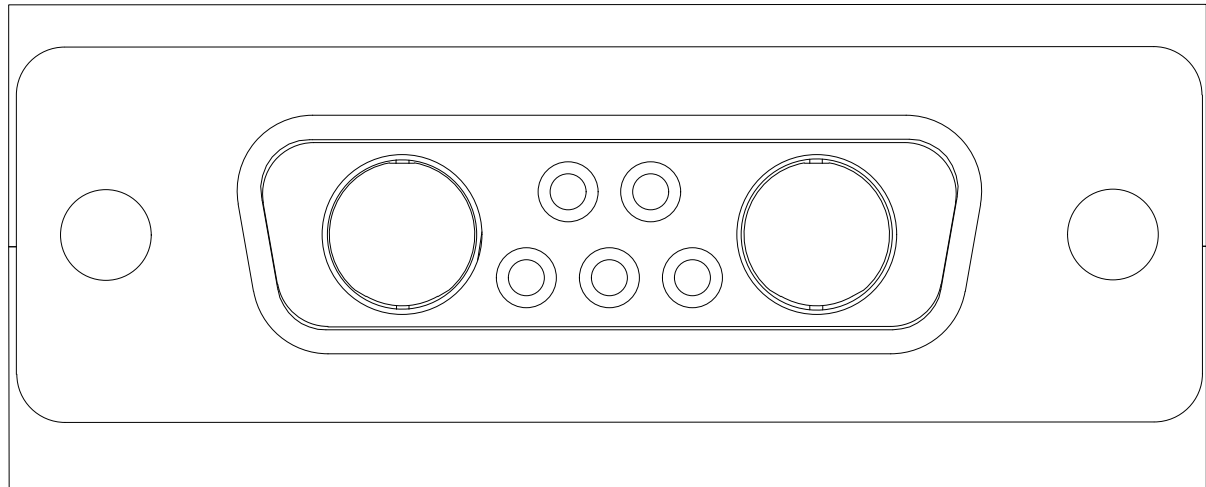
E

1



MATE CABLE

2



3007W2SCM99A10X

3

NOTES:

1. P/N OF MATING CONNECTOR REQUIRED: CONEC 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	11/25/2014	Housing Outline 129				
DESIGNED	---	6/4/2014					
CHECKED	SB	11/25/2014	SIZE A	DWG/PART NO. OL_129			REV 0
ENG. APPROVED							
MFG. APPROVED			SCALE: NONE	CAGE CODE 67DZ3		SHEET 4 OF 4	

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B

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D

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