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Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	250423	Chassis, MM2 to PA Threaded Spacer, 7mm
2	1	201005	Micromodem 2 DSP
3	1	250417	Chassis Micromodem 2 Accessory Spacer 7mm
4	1	203004	Micromodem c67 Coprocessor
5	1	250407	Chassis, MM to Accessory
6	1	203001	Multi-Channel Analog Input
7	1	202009	Micromodem Power Amplifier RFF OBM, Wide Input

Specifications:

Part Numbering: 250046-xxxx-yy

where -xxxx represents the magnetic matching network required for a particular transducer and -yy represents the magnetic module form factor.

Weight: 0.75lbs / 340g for the electronics stack only. See OBM weights.

Input Voltage Range: 10.5V-48VDC (>36VDC may require special configuration)

Power Consumption (As of 2018-01 with appropriate hardware firmware revisions):

Hibernate: 0.96mW @ 12VDC

Idle: 0.82W @ 12VDC

Receive (FSK): 0.82W @ 12VDC

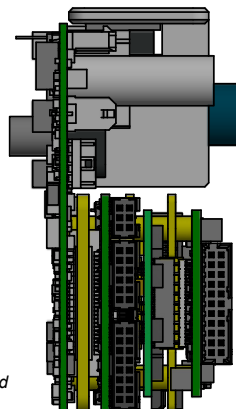
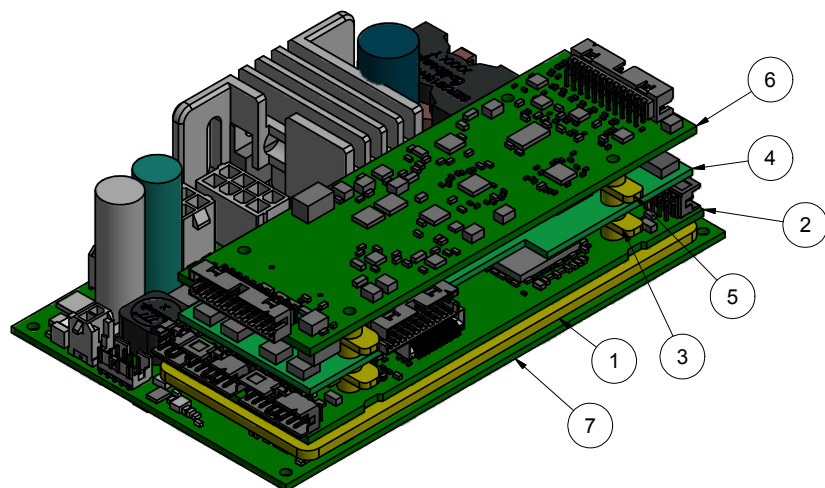
Receive (S-PSK): 2.74W @ 12VDC

Receive (M-PSK): xxW @ 12VDC with 4-Element Array Dependent on Array Used

Transmit: Dependent on Transducer and Matching Network

Handling: High voltage DC components are present and exposed on the bottomside of the power amplifier. Please take the necessary precautions to avoid shorting circuitry on the board. A minimum of 0.313" clearance is recommended between the bottom side of the circuit board and the nearest mechanical component.

Schematic: Refer to 250046-SCH for typical wiring inter-connects.



PA J5 - Transducer

PA J2 - Power Input

MM J3 - User Serial Ports

0.125

4.750

5.000

0.125

0.125

2.875

3.125

MC J2 - Array In

PA J7 - OBM Input

PA J6 - OBM External Drive

1.399

0.402

Unless Otherwise Noted:

1. Tolerances: Decimal
.XX ± 0.01
.XXX ± 0.005
2. Dimensions are in Inches
3. Break All Sharp Edges
4. Surface Finishes Critical for O-Ring Surfaces
5. Material:
6. Finish:

Angular
± 1 Deg



Woods Hole Oceanographic Institution
Acoustic Communications Group

86 Water Street, Dept. 4 MS 18, Woods Hole, MA 02543

Drawing Title:

**Micromodem Multi-RX PSK Stack with
RFF OBM Power Amplifier**

Designer: Keenan Ball

11/16/2018

Engineer: Keenan Ball

11/16/2018

Size: B

Cage Code: 88846

Drawing Number:

250046-ASM

Rev: A

Sheet 1 of 5

4

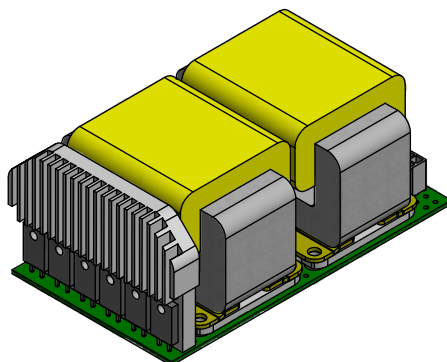
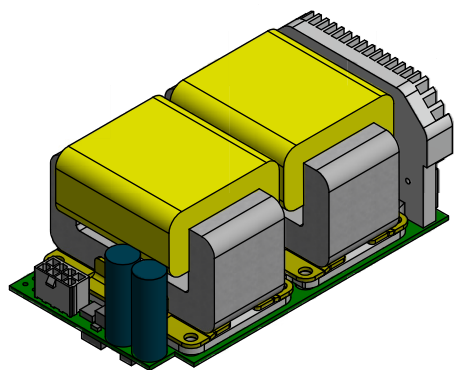
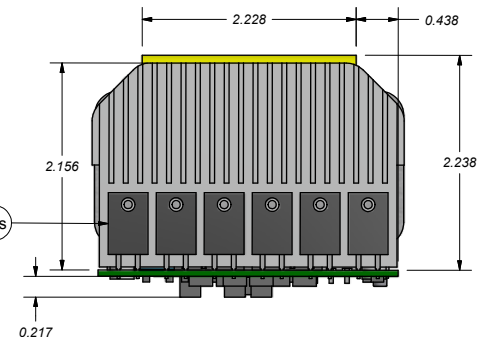
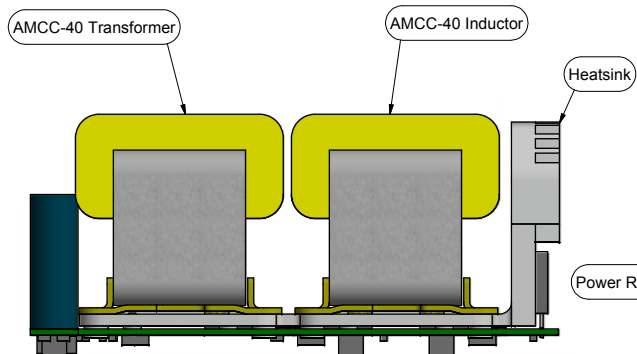
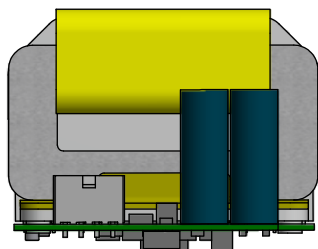
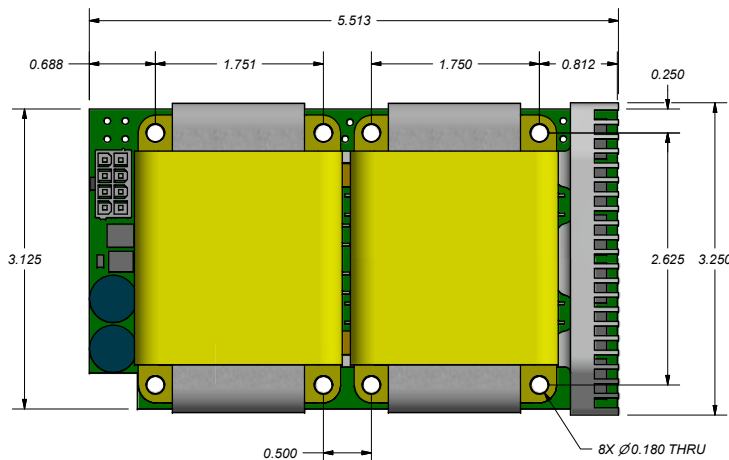
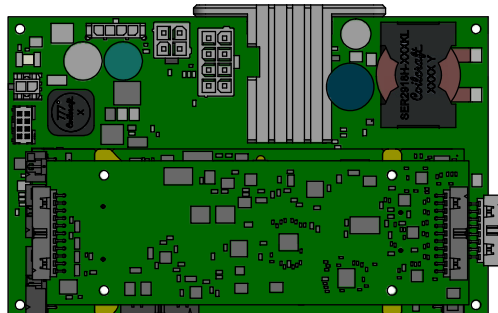
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250046-xxxx-01

Designed for AMCC-40 Magnetics
Fits inside a 4.0" ID Housing
OBM Weight: ~3.25 lbs / 1.47kg



- Unless Otherwise Noted:
1. Tolerances: Decimal
.XX ± 0.01
.XXX ± 0.005
2. Dimensions are in Inches
3. Break All Sharp Edges
4. Surface Finishes Critical for O-Ring Surfaces
5. Material:
6. Finish:

Angular
± 1 Deg



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Acoustic Communications Group
86 Water Street, Dept. 4 MS 18, Woods Hole, MA 02543

Drawing Title:

Micromodem Multi-RX PSK Stack with
RFF OBM Power Amplifier

Designer: Keenan Ball
Engineer: Keenan Ball

11/16/2018
11/16/2018

Size: C

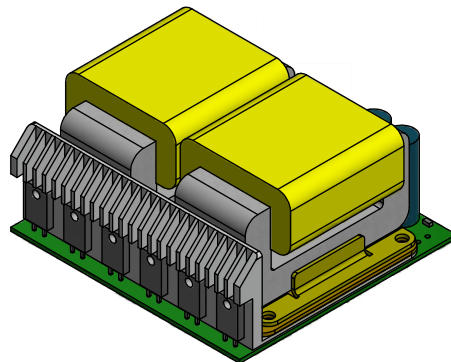
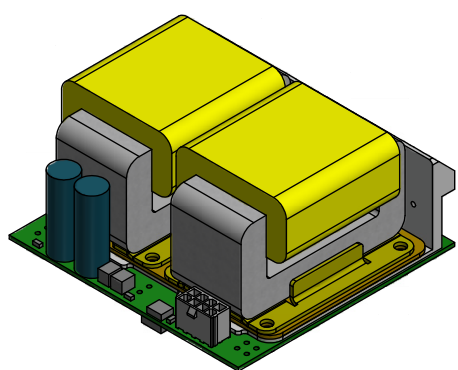
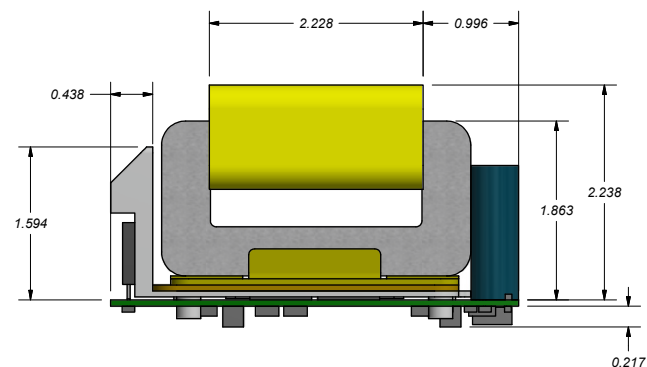
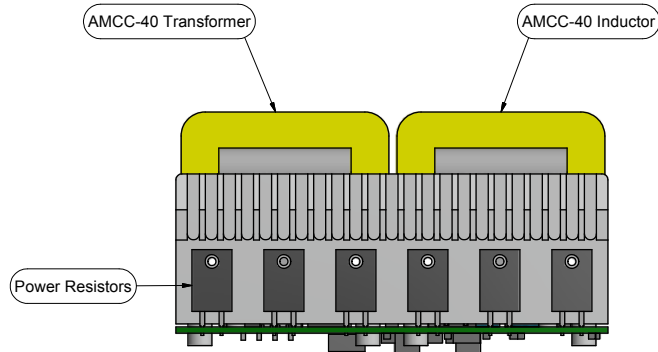
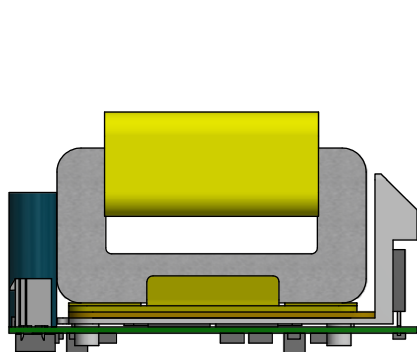
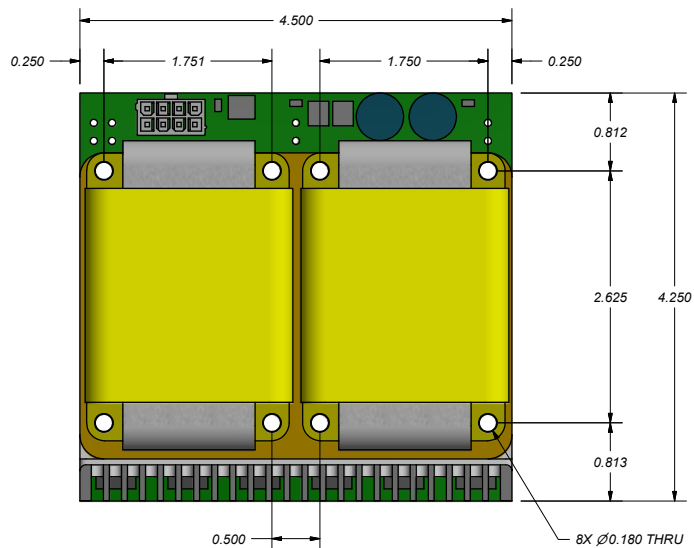
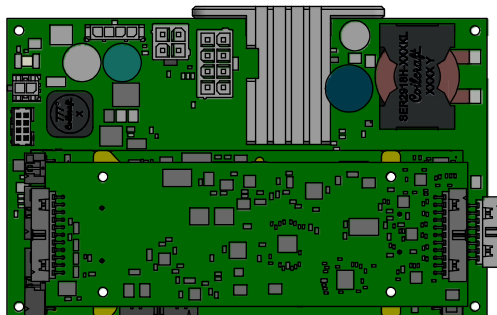
Cage Code: 88846

Drawing Number: 250046-ASM

Rev: A

Sheet 2 of 5

Designed for AMCC-40 Magnetics
Fits inside a 6.0" ID Dual Band Housing
OBM Weight: ~3.25 lbs / 1.47kg



1. Tolerances: Decimal
 .XX $\pm$ 0.01
 .XXX $\pm$ 0.005

Angular
± 1 Deg

2. Dimensions are in Inches
3. Break All Sharp Edges
4. Surface Finishes Critical for O-Ring Surfaces
5. Material:
6. Finish:

Designer:	Keenan Ball
Engineer:	Keenan Ball

11/16/2018
11/16/2018



Woods Hole Oceanographic Institution
Acoustic Communications Group
86 Water Street, Dept. 4 MS 18, Woods Hole, MA 02543

Drawing Title:

Micromodem Multi-RX PSK Stack with RFF OBM Power Amplifier

Size:
C

Cage Code:
88846

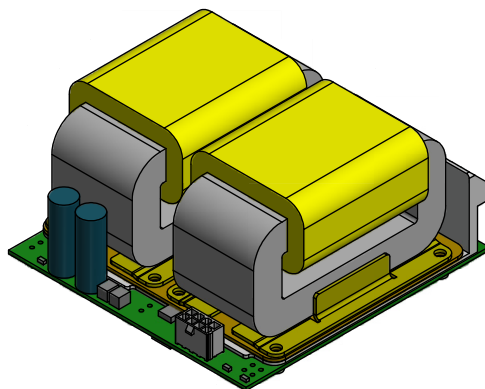
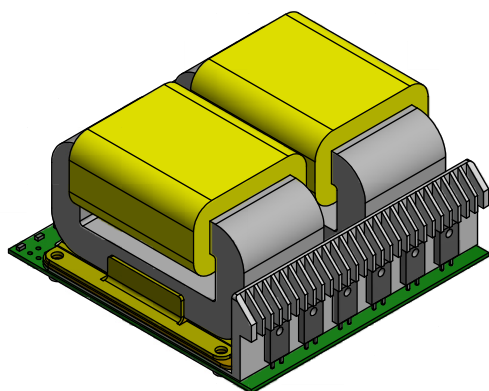
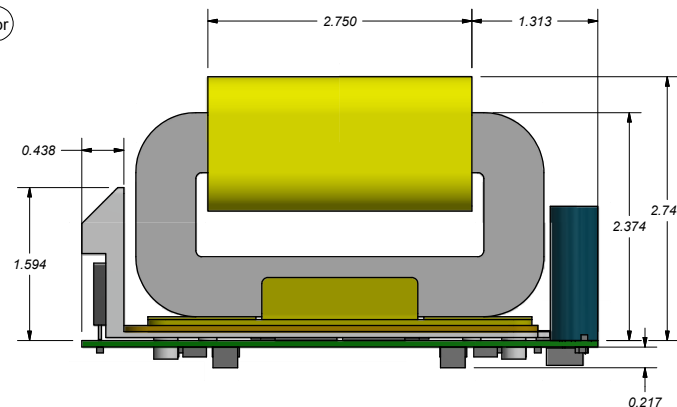
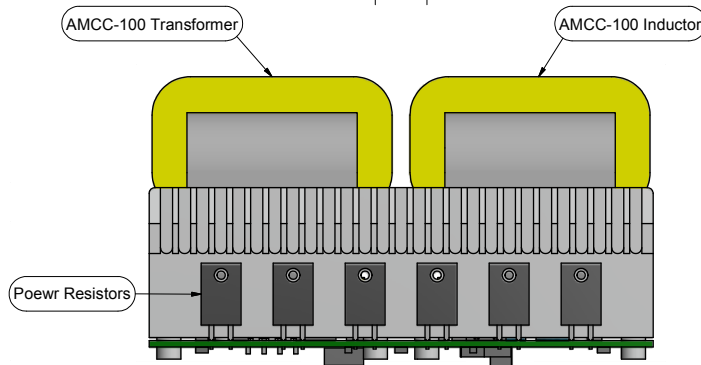
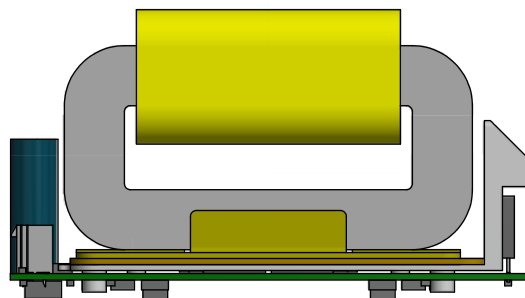
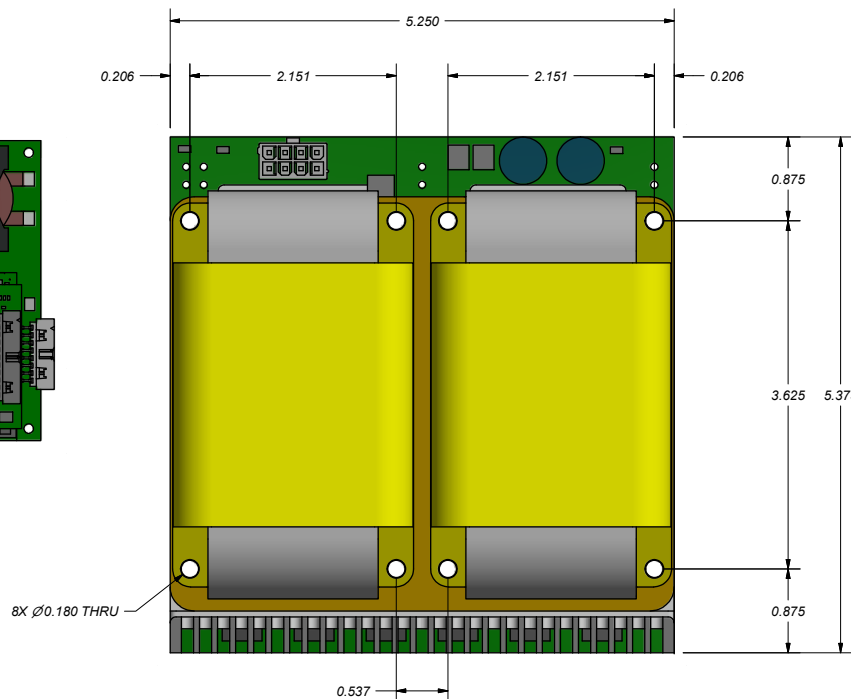
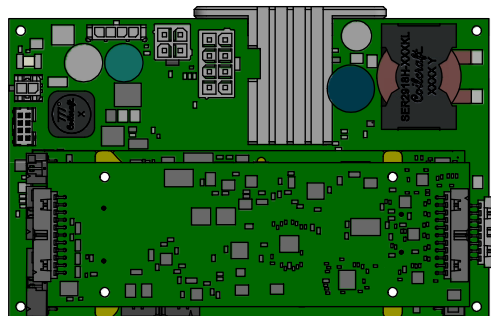
Drawing Number:	250046-ASM
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Rev:	A
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Sheet 3 of 5

250046-xxxx-03

Designed for AMCC-100 Magnetics
Fits inside a 7.0" ID Dual Band Housing
OBM Weight: ~6.18 lbs / 2.81kg



- Unless Otherwise Noted:
1. Tolerances: Decimal
.XX ± 0.01
.XXX ± 0.005
 2. Dimensions are in Inches
 3. Break All Sharp Edges
 4. Surface Finishes Critical for O-Ring Surfaces
 5. Material:
 6. Finish:

Angular
± 1 Deg



Woods Hole Oceanographic Institution
Acoustic Communications Group
86 Water Street, Dept. 4 MS 18, Woods Hole, MA 02543

Drawing Title:

Micromodem Multi-RX PSK Stack with
RFF OBM Power Amplifier

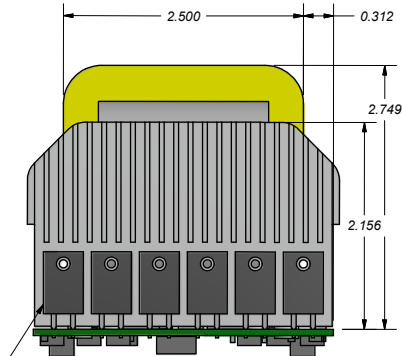
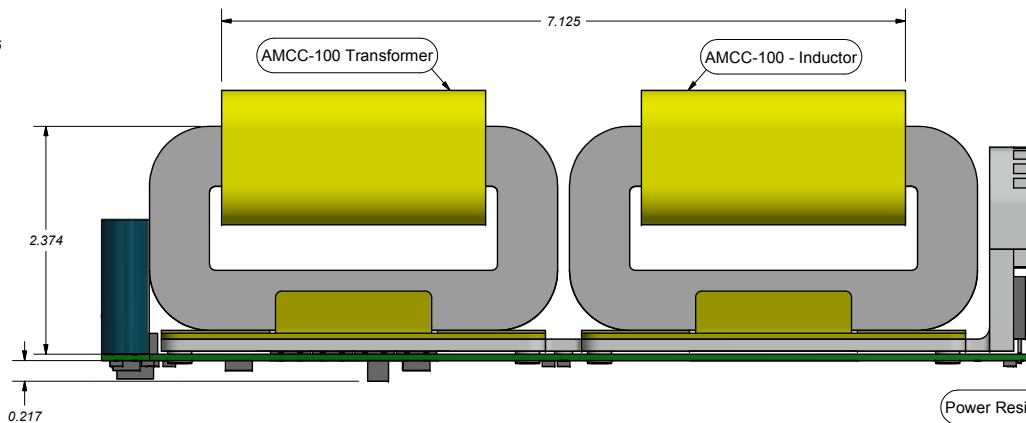
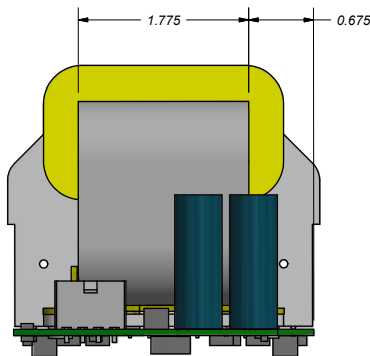
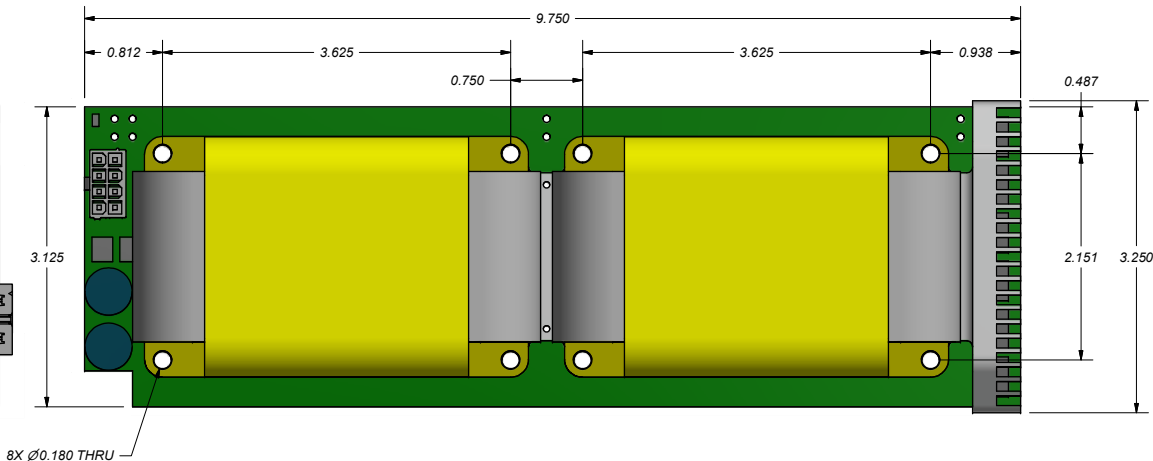
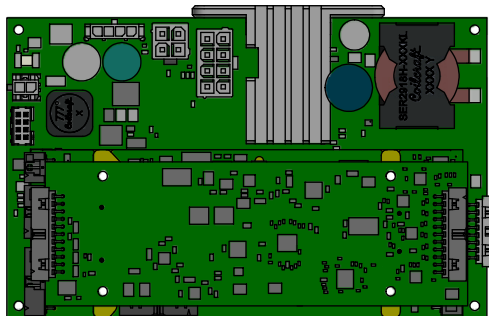
Designer:	Keenan Ball	11/16/2018
Engineer:	Keenan Ball	11/16/2018

Size:	Cage Code:	Drawing Number:	Rev:
C	88846	250046-ASM	A

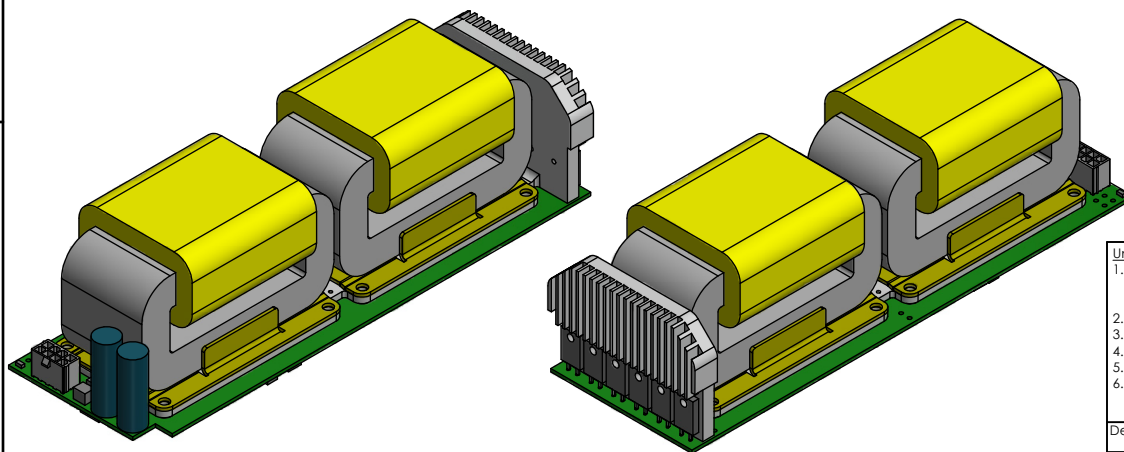
Sheet 4 of 5

250046-xxxx-04

Designed for AMCC-100 Magnetics
Fits inside a 4.0" ID Housing
OBM Weight: ~6.18 lbs / 2.81kg



Power Resistors



- Unless Otherwise Noted:
1. Tolerances: Decimal
.XX ± 0.01
.XXX ± 0.005
 2. Dimensions are in Inches
 3. Break All Sharp Edges
 4. Surface Finishes Critical for O-Ring Surfaces
 5. Material:
 6. Finish:

Angular
± 1 Deg



Woods Hole Oceanographic Institution
Acoustic Communications Group
86 Water Street, Dept. 4 MS 18, Woods Hole, MA 02543

Drawing Title:

Micromodem Multi-RX PSK Stack with
RFF OBM Power Amplifier

Designer: Keenan Ball
Engineer: Keenan Ball

11/16/2018
11/16/2018

Size: C

Cage Code: 88846

Drawing Number: 250046-ASM

Rev: A

Sheet 5 of 5