

# DIFFERENTIAL TIME OF ARRIVAL DIRECTION FINDER

ANTENNA CONNECTION  
TO RADIO NON-CRITICAL

ANTENNA TYPE:  
1/4 TO 3/4 WAVE  
SEPERATION  
SAME ELEMENT  
SAME IMPEDANCE  
SAME LENGTH

ANTENNA CONNECTIONS:  
SAME LENGTH  
SAME TYPE  
SAME CONNECTORS

ADDED MODULATIOPN TONE  
TO QUIET CARRIER WHEN  
TRANSMITTER IS NOT NORMAL  
TO ANTENNA ARRAY

ON

MARK ZERO POINT FOR  
PICK & PLACE FILE ON  
PRINTED CIRCUIT BOARD

## KC0JFQ

TOP_FULL	
DRAWING FRAME SHOWN ON CIRCUIT BOARD	
BOARD ASSY	
DRAWING FRAME SHOWN ON CIRCUIT BOARD	
BOT_COMPACT	
DRAWING FRAME SHOWN ON CIRCUIT BOARD	
BOARD-ID	
DRAWING FRAME SHOWN ON CIRCUIT BOARD	

Drawn	Date
W. ROBISON	8/2019
Designed	Date
W. ROBISON	8/2019

~~PWB RELEASED AS 2D354 102-73170-A~~

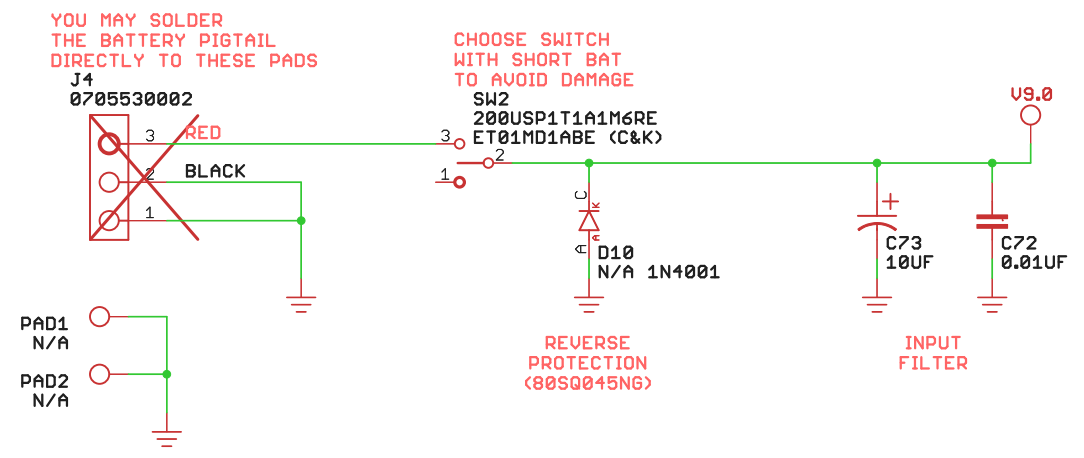
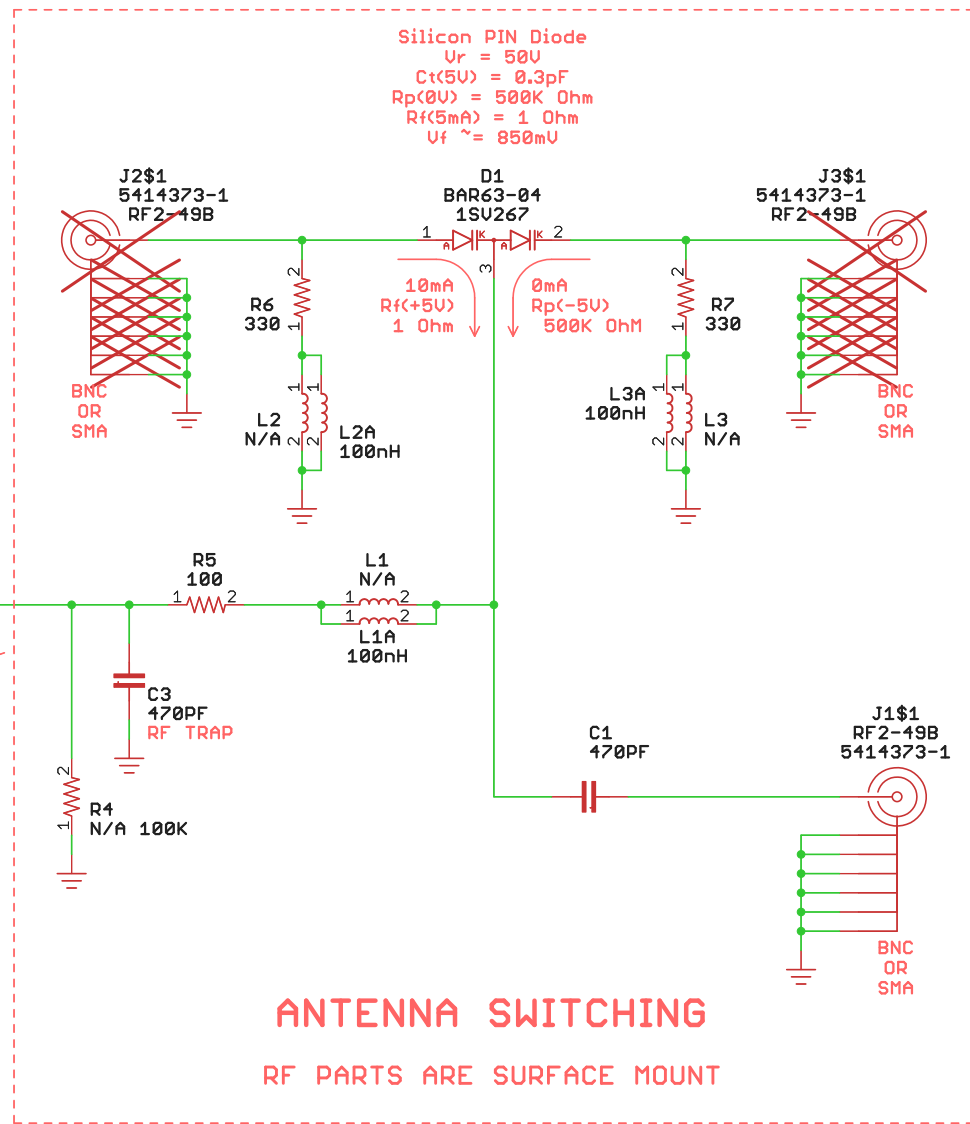
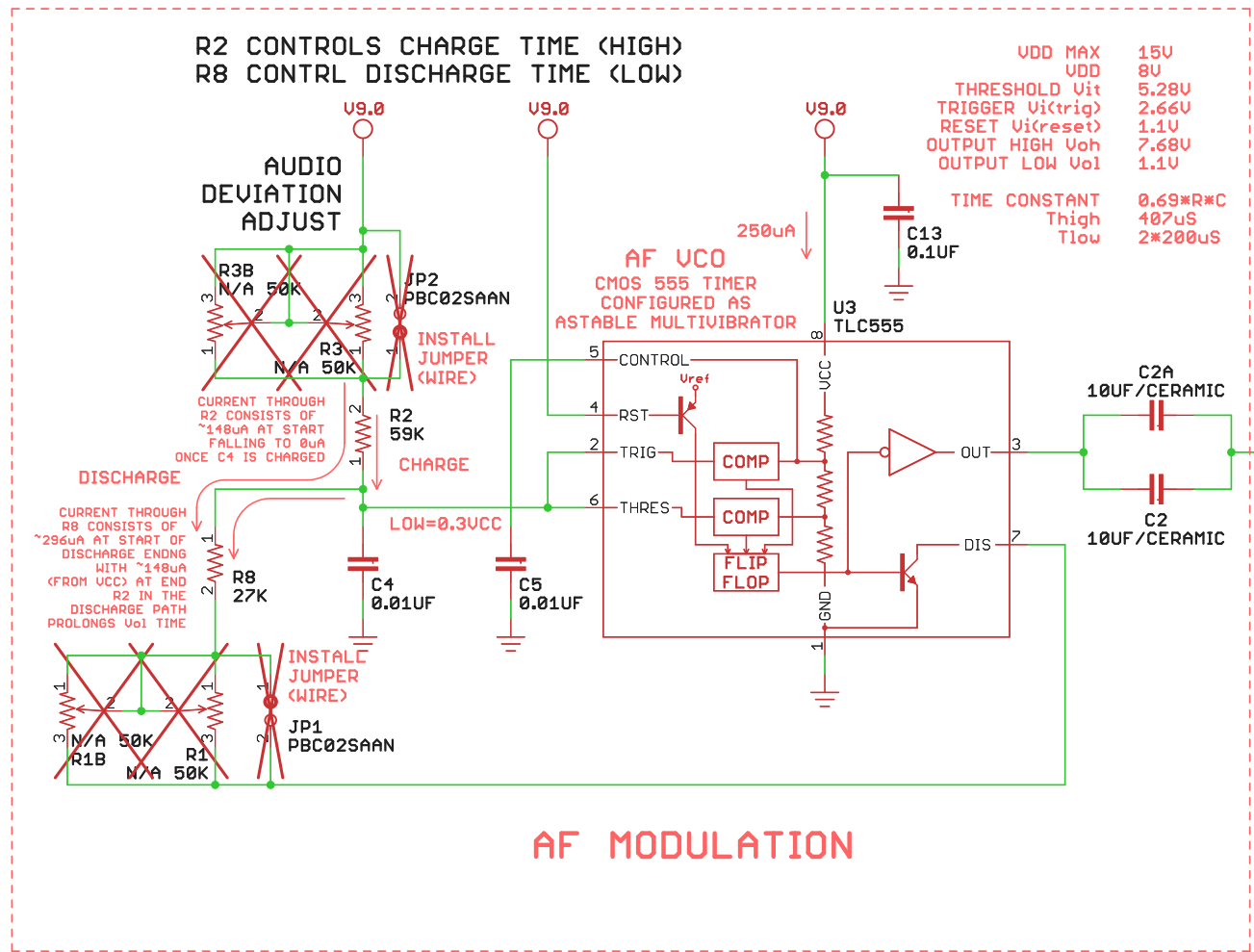
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The University of Iowa  
Department of Physics & Astronomy  
Iowa City, IA, USA

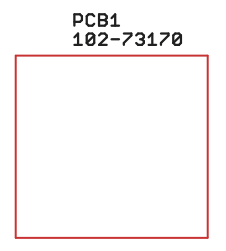
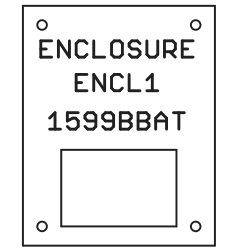
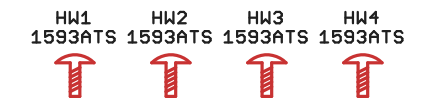
TITLE: ICARC DTOA DIRECTION FINDER  
A102\_73170\_A  
PROD

CAGE	Series	Number	2 Layers	Rev
2D354	102	B 73170		A

Date: not saved! 3/28/23 4:43 PM Sheet: 1/3



**BOARD MOUNTING SCREWS**



**THIS BOARD CONTAINS STATIC SENSITIVE DEVICES. HANDLE ONLY IN STATIC SAFE ENVIRONMENT**

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<b>W. ROBISON</b>	<b>8/2019</b>
<b>Designed</b>	<b>Date</b>
<b>W. ROBISON</b>	<b>8/2019</b>



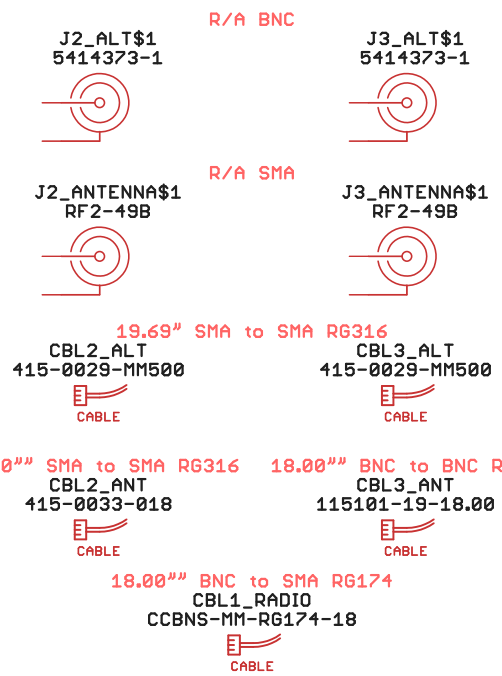
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Iowa City, IA, USA

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<b>PROD</b>			

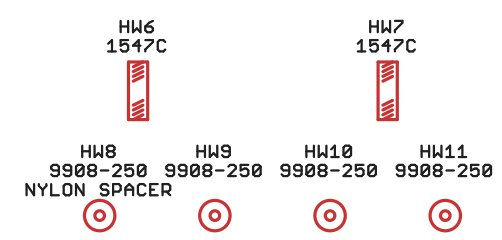
<b>CAGE</b>	<b>Series</b>	<b>Number</b>	<b>2 Layers</b>	<b>Rev</b>
<b>2D354</b>	<b>102</b>	<b>B 73170</b>		<b>A</b>
<b>Date: not saved!</b>		<b>3/28/23 4:43 PM Sheet: 2/3</b>		

# HM1599BBAT MECHANICAL DETAILS

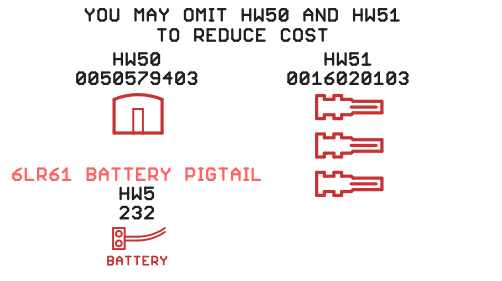
## CABLE AND COAX SELECTION



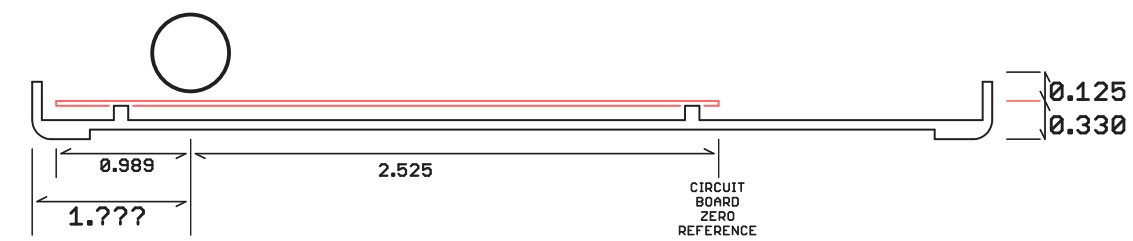
## ANTENNA MOUNTING HARDWARE



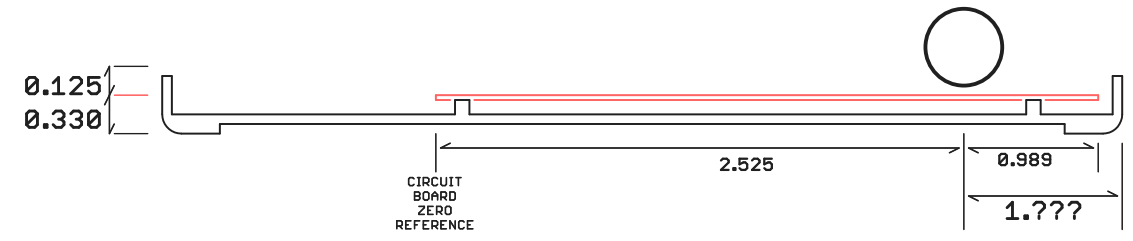
## BATTERY CONNECTOR



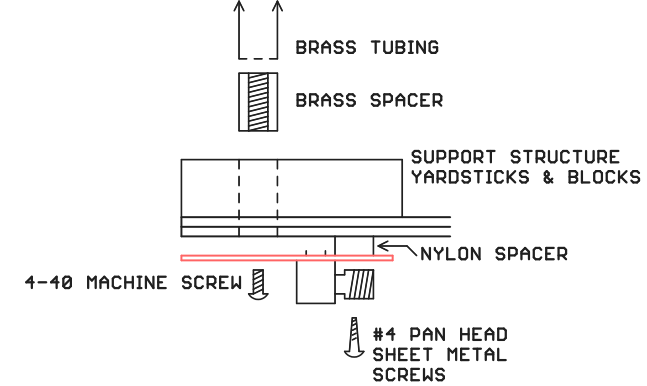
## ANTENNA CONNECTORS



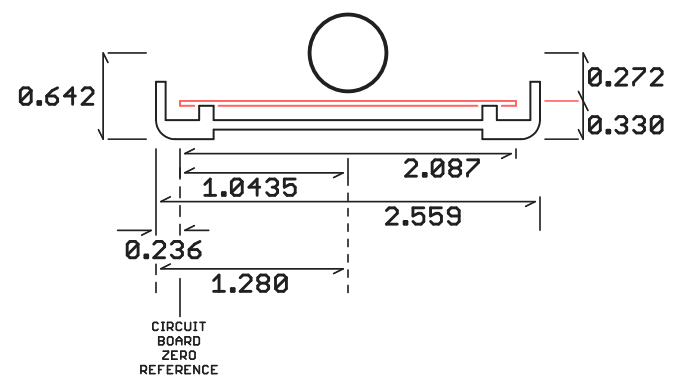
## ANTENNA CONNECTORS



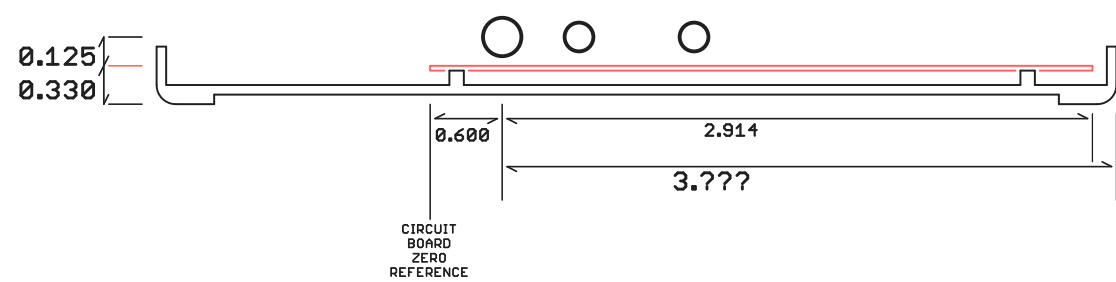
## ANTENNA ELEMENT MOUNTING (BASE)



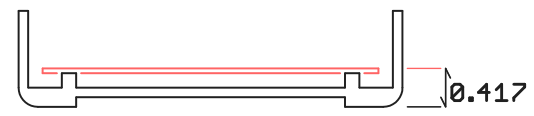
## RADIO CONNECTOR



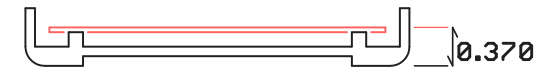
## POWER AND TIMING



## CIRCUIT BOARD HEIGHT ABOVE BASELINE



## CIRCUIT BOARD HEIGHT ABOVE BASELINE (BASE)



**NOT TO SCALE**

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W. ROBISON	8/2019
Designed	Date
W. ROBISON	8/2019

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