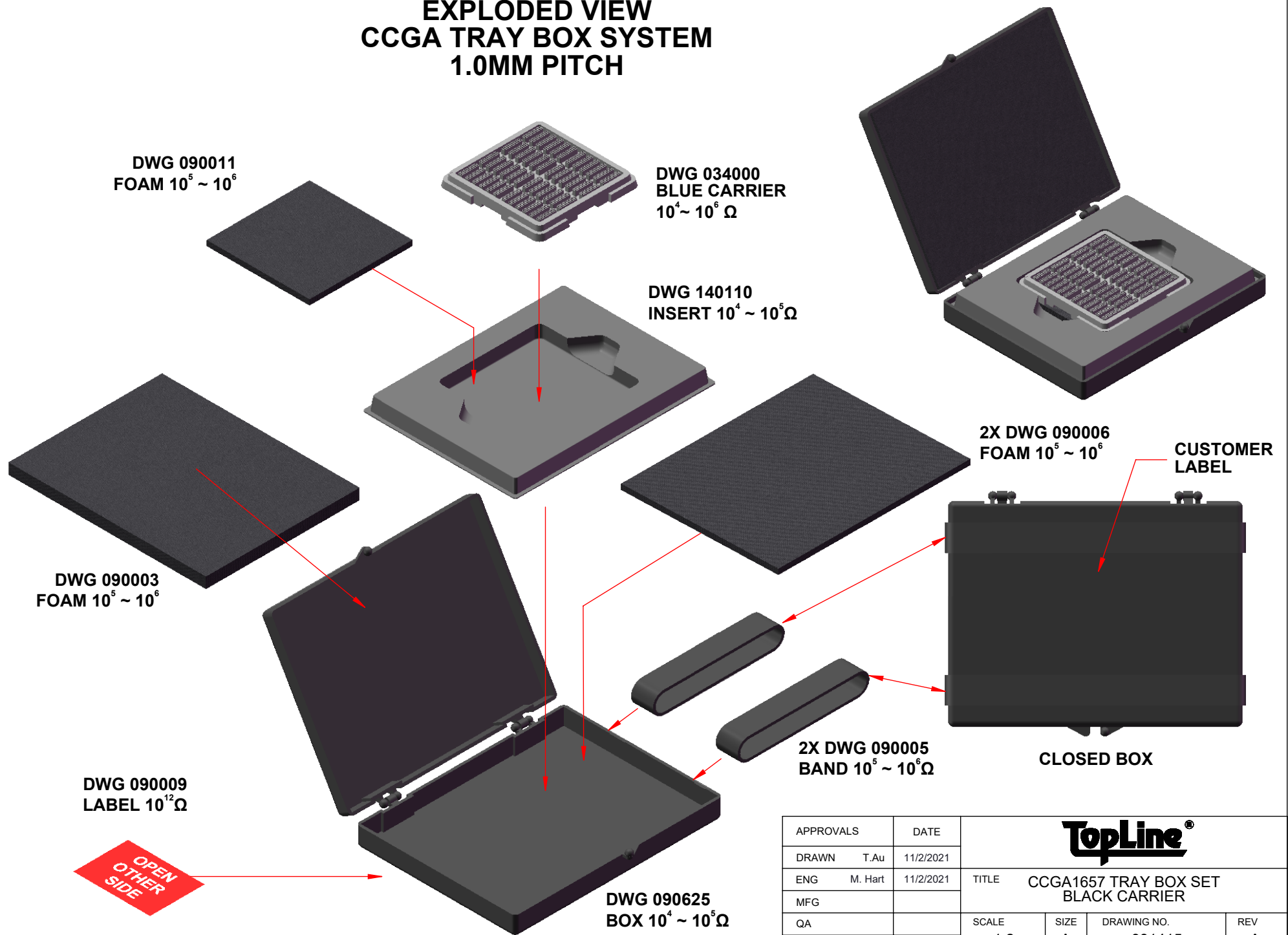


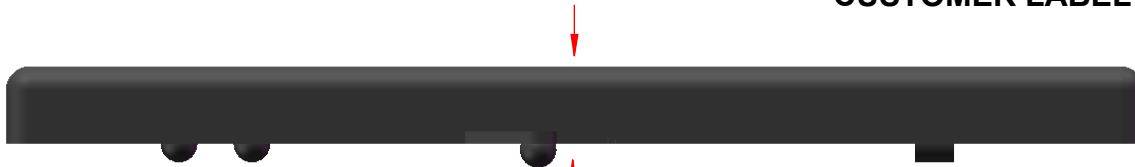
# EXPLODED VIEW CCGA TRAY BOX SYSTEM 1.0MM PITCH



APPROVALS	DATE	<b>TopLine®</b>			
DRAWN T. Au	11/2/2021				
ENG M. Hart	11/2/2021	TITLE CCGA1657 TRAY BOX SET BLACK CARRIER			
MFG		SCALE	SIZE	DRAWING NO.	REV
QA		1:2	A	931415	A
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 13
REVISED					

**EXPLODED SIDE VIEW  
PITCH 1.0mm**

**CUSTOMER LABEL**



**DWG 090625 BOX TOP**



**DWG 090003 FOAM (LOW PROFILE CCGA)  
DWG 090006 FOAM (HIGH PROFILE CCGA)**



**CCGA COMPONENT**



**DWG 034000 CARRIER**



**DWG 090011 FOAM (OPTIONAL LOW PROFILE CCGA)**



**DWG 140110 INSERT**



**DWG 090006 FOAM  
2X - LOW PROFILE CCGA  
1X - HIGH PROFILE CCGA**



**DWG 090625  
BOX BOTTOM**



**DWG 090009 LABEL**

**TopLine®**

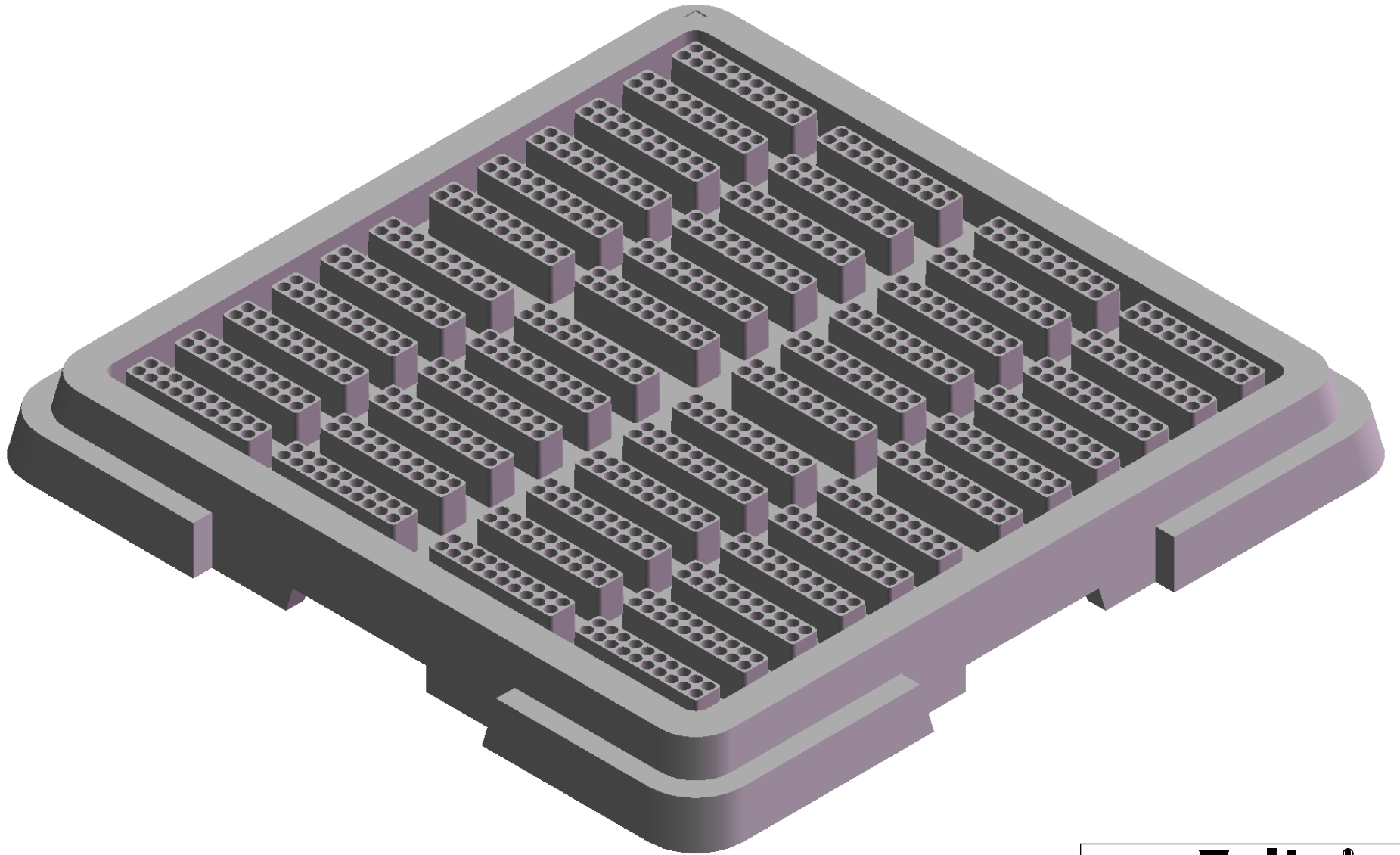
TITLE CCGA1657 TRAY BOX SET  
BLACK CARRIER

SCALE 1:2	SIZE A	DRAWING NO. 931415	REV A
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DO NOT SCALE DRAWING

SHEET 2 OF 13

MODEL  
TOP



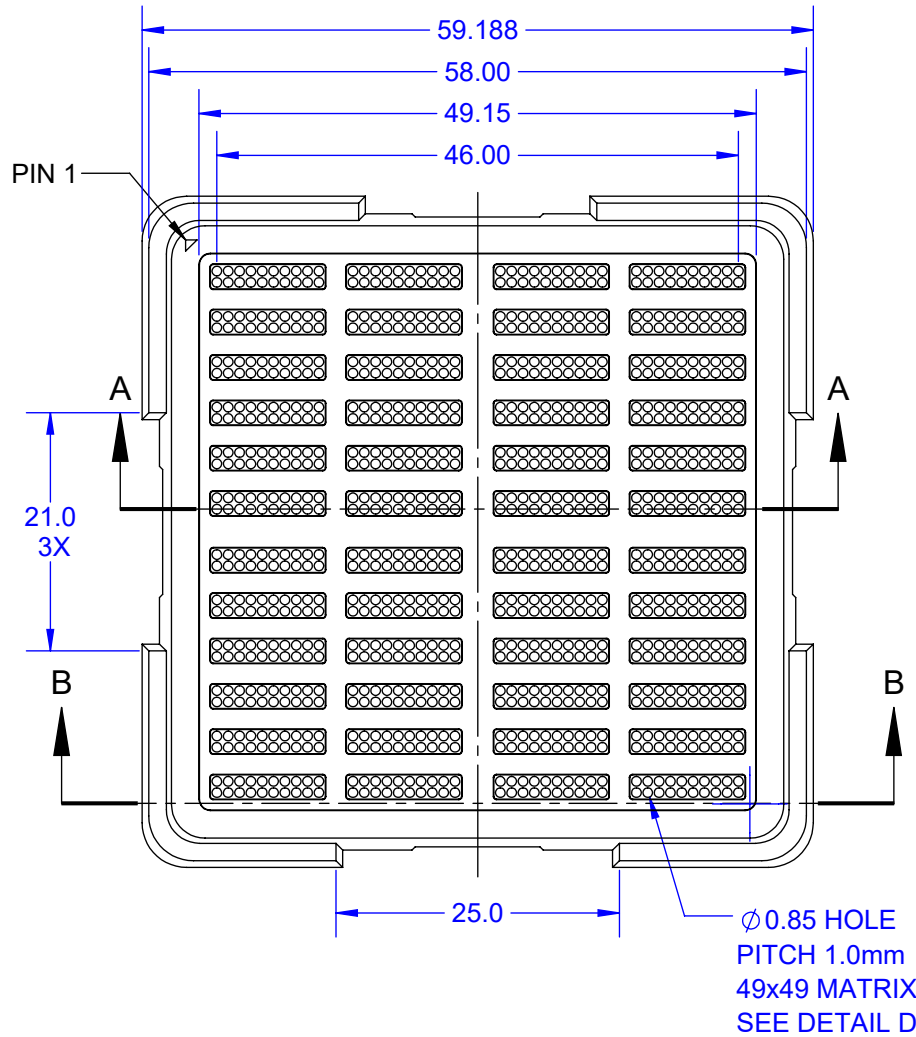
**TopLine**<sup>®</sup>

TITLE CCGA1657 TRAY BOX SET  
BLACK CARRIER

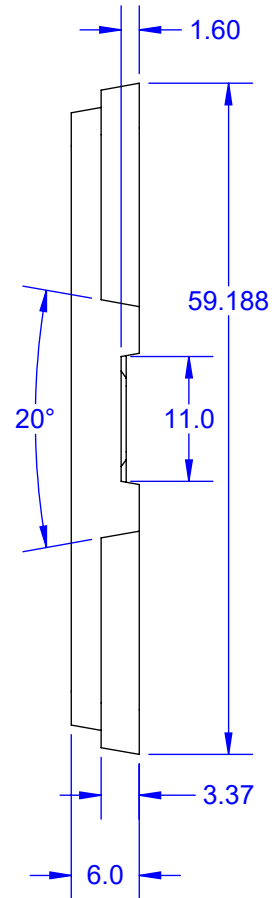
SCALE 3:1	SIZE A	DRAWING NO. 931415	REV A
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DO NOT SCALE DRAWING SHEET 3 OF 13

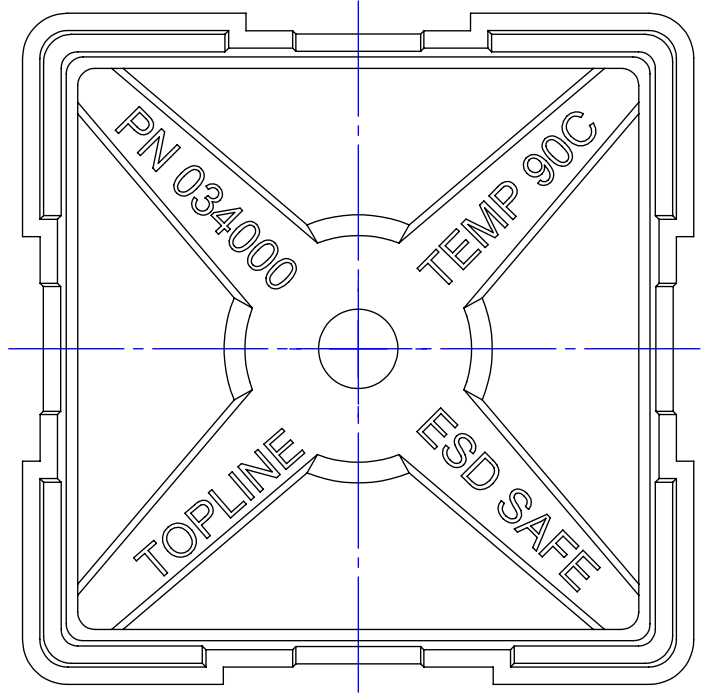
**TOP**



**SIDE**

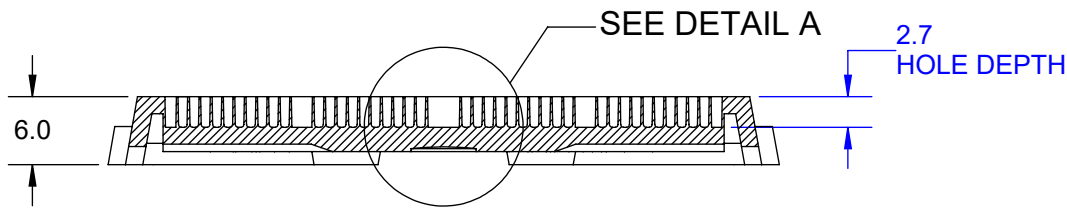


**BOTTOM**



**NOTES:**

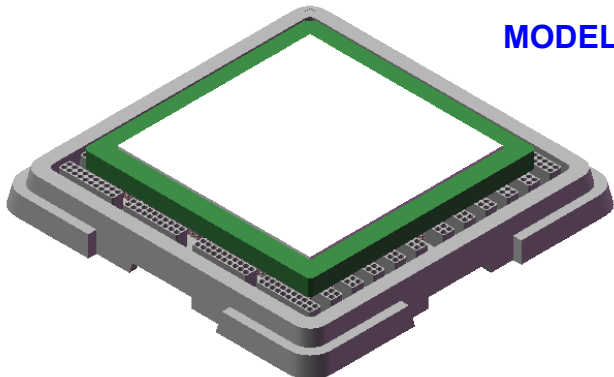
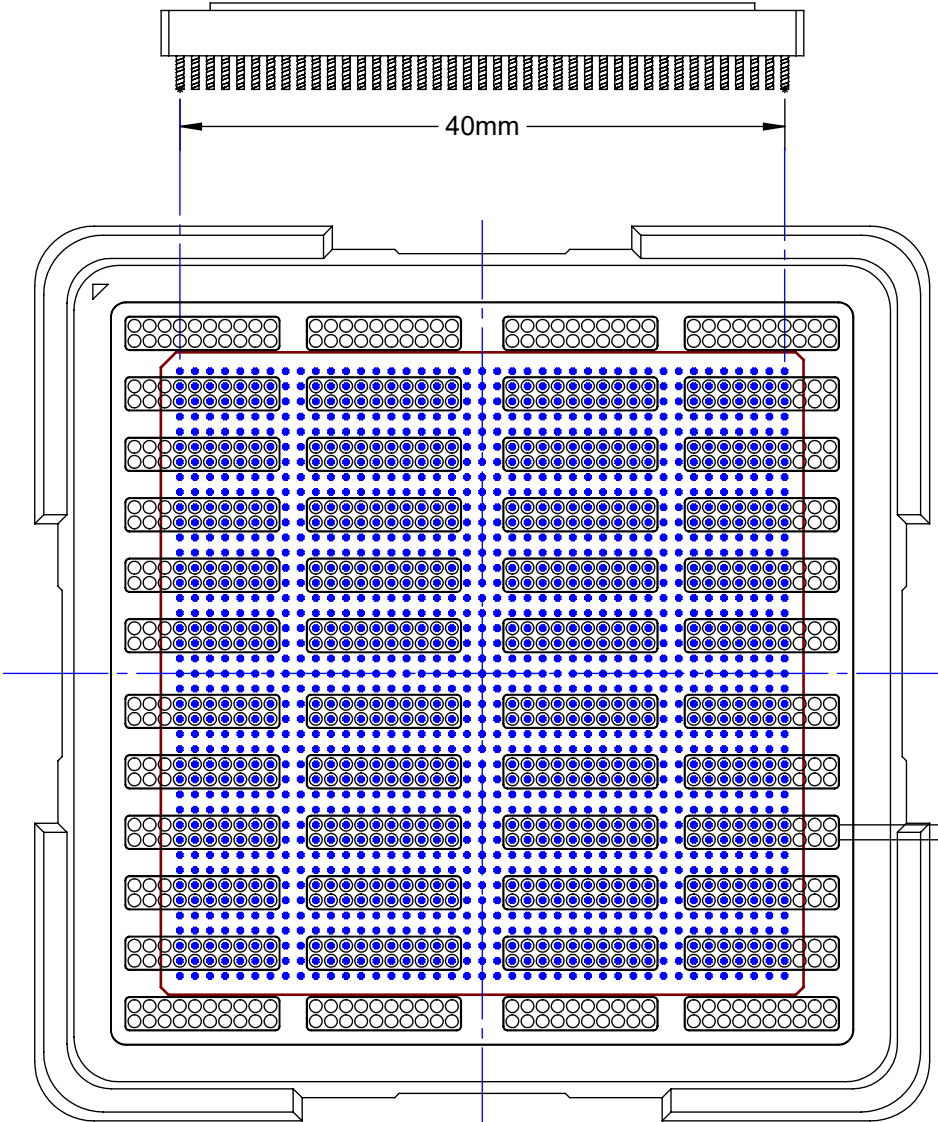
1. DIMENSION MM.
2. MATERIAL: CONDUCTIVE POLYCARBONATE.
3. TEMPERATURE 90°C MAX.
4. COLOR: BLACK.
5. PERMANENT ESD SAFE  
SURFACE RESISTIVITY  $10^4 \sim 10^6 \Omega$ .



**SECTION A-A**

APPROVALS	DATE	<b>TopLine®</b>			
DRAWN T. Au	11/2/2021				
ENG M. Hart	11/2/2021	TITLE CCGA1657 TRAY BOX SET BLACK CARRIER			
TOLERANCE	MFG	SCALE	SIZE	DRAWING NO.	REV
[X] MM	QA	3:2	A	931415	A
X.X = ±0.2	CUST	DO NOT SCALE DRAWING			SHEET 4 OF 13
X.XX = ±0.1	REVISED				

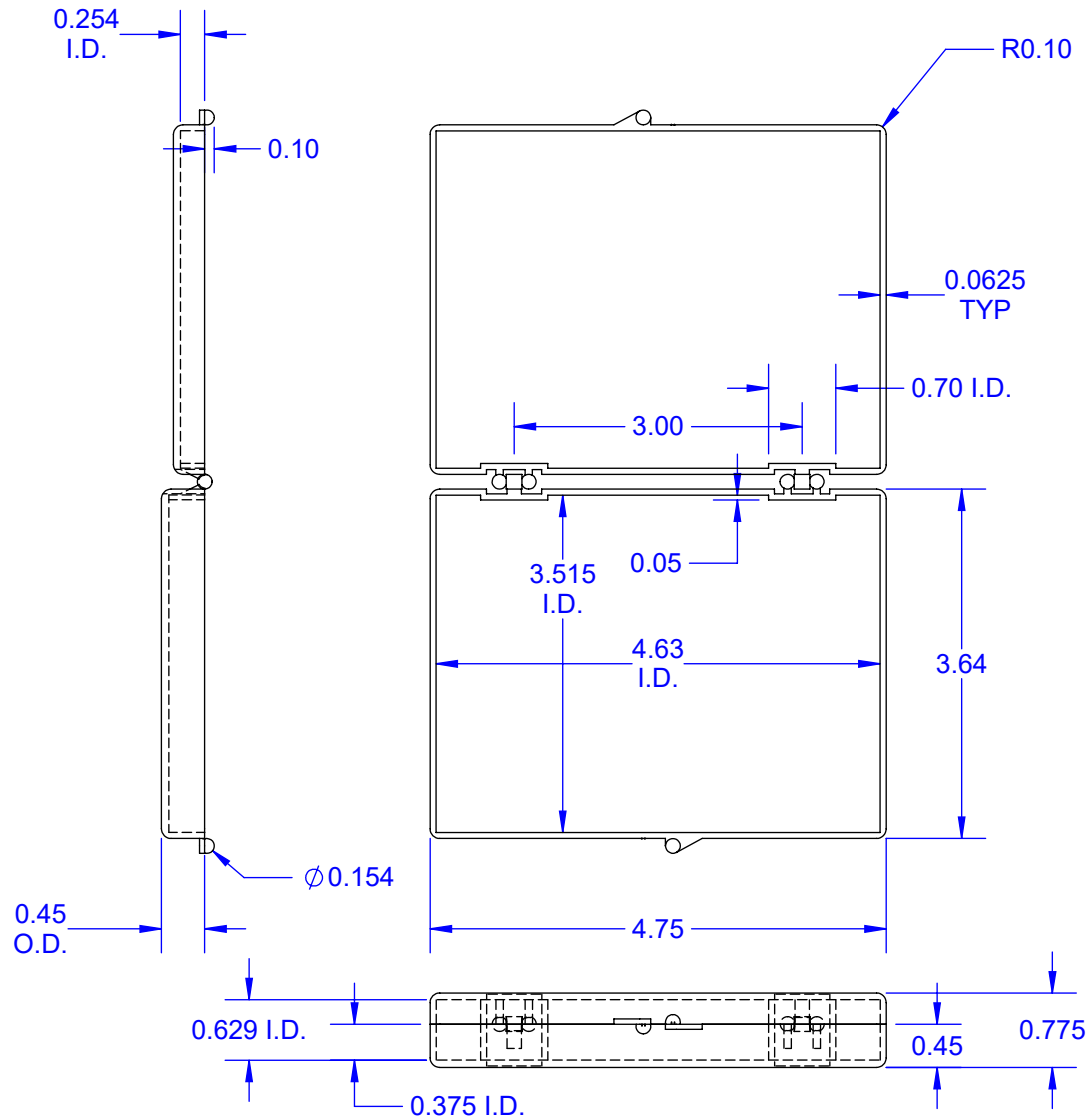
**CCGA1657  
COLUMNS 41x41  
42.5x42.5mm**



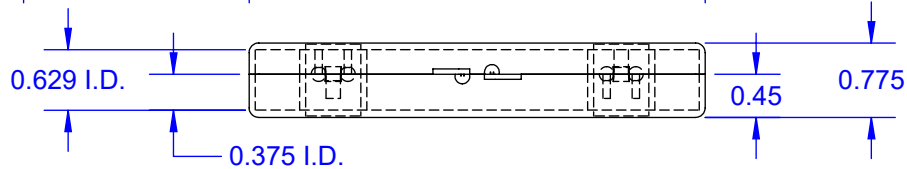
PITCH  
1.0mm TYP.

<b>TopLine<sup>®</sup></b>			
TITLE		CCGA1657 TRAY BOX SET BLACK CARRIER	
SCALE	SIZE	DRAWING NO.	REV
2:1	A	931415	A
DO NOT SCALE DRAWING			SHEET 5 OF 13

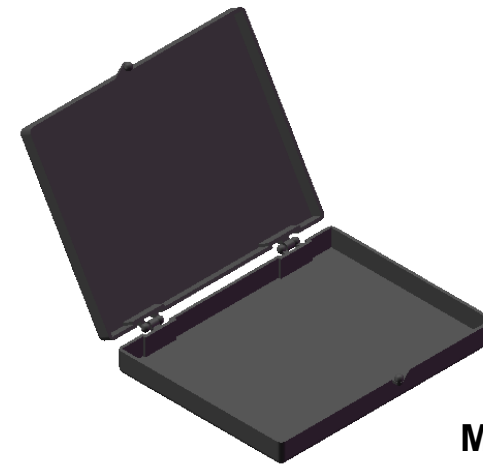
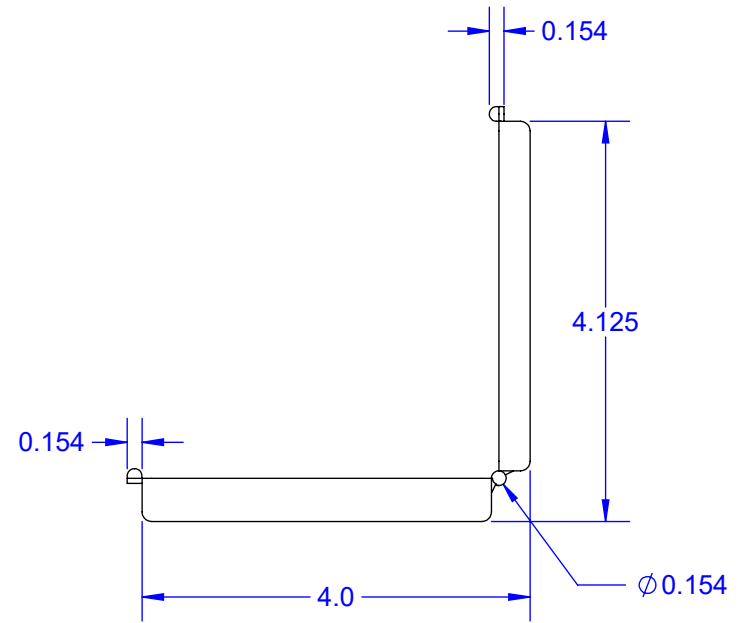
### TOP (OPEN)



### FRONT (CLOSED)



### SIDE VIEW (OPEN)



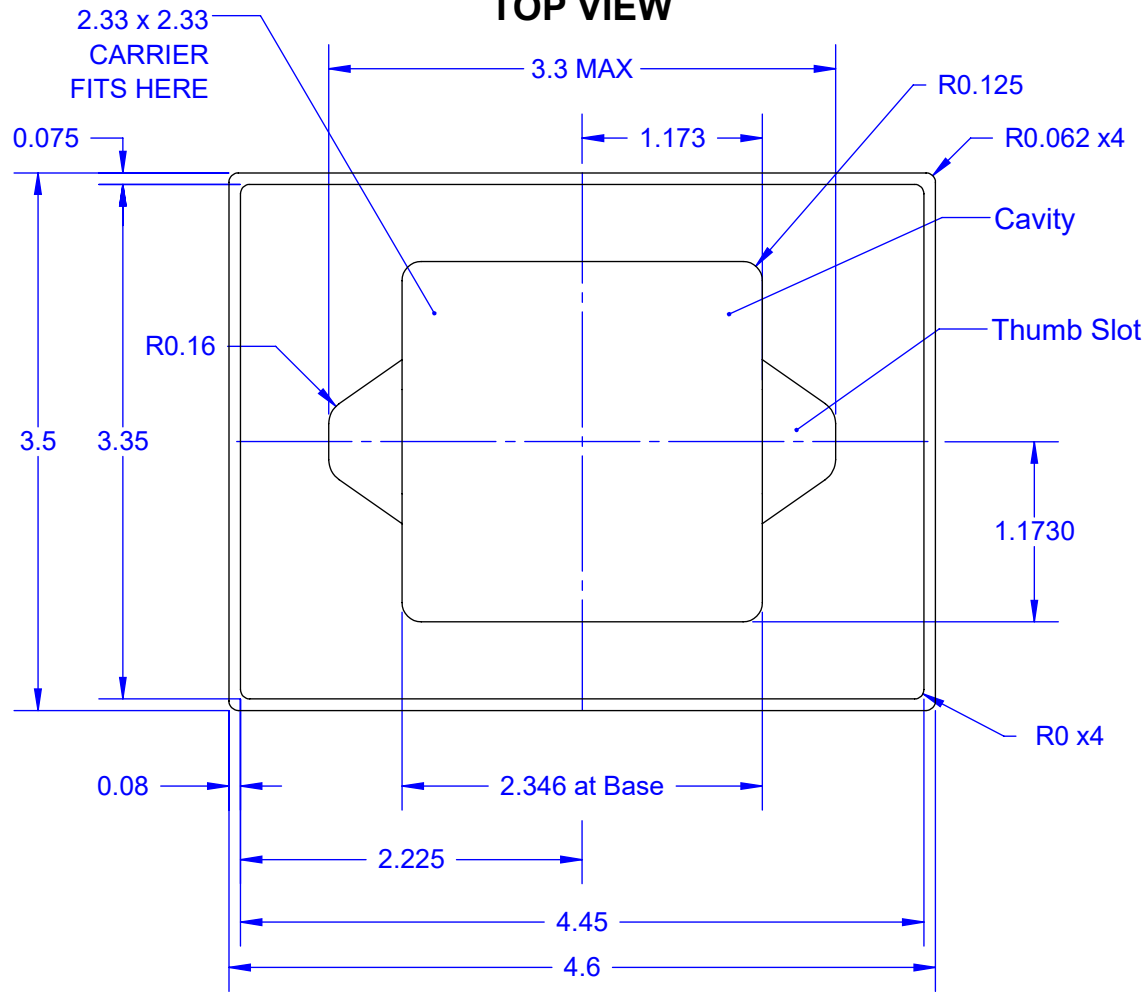
**MODEL**

Notes: (Unless Otherwise Specified).

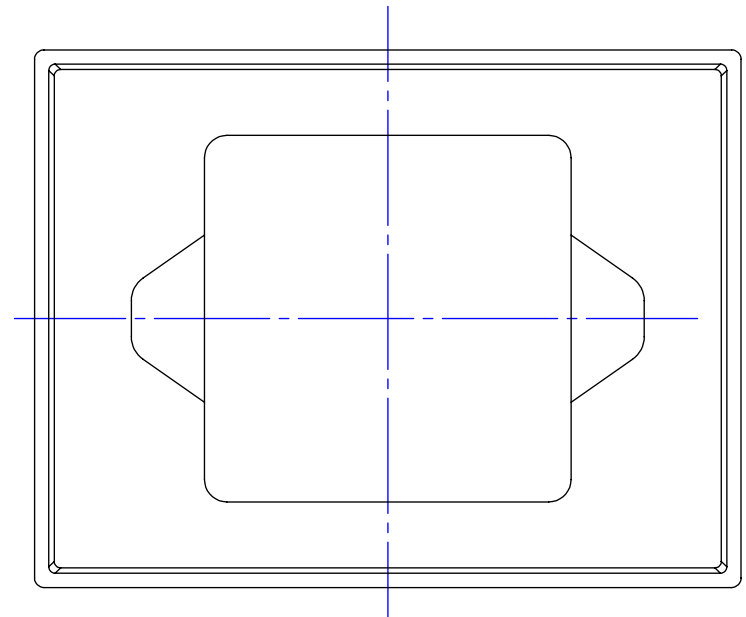
- 1) SURFACE RESISTIVITY:  $10^4 \sim 10^5 \Omega$ .
- 2) MATERIAL: CARBON FILLED POLYPROPYLENE.
- 3) DIMENSIONS IN INCHES.

<b>TopLine®</b>			
TITLE		EC1-15mm EMPTY HINGE BOX	
SCALE	SIZE	DRAWING NO.	REV
1:2	A	090625	A
DO NOT SCALE DRAWING			SHEET 6 OF 13

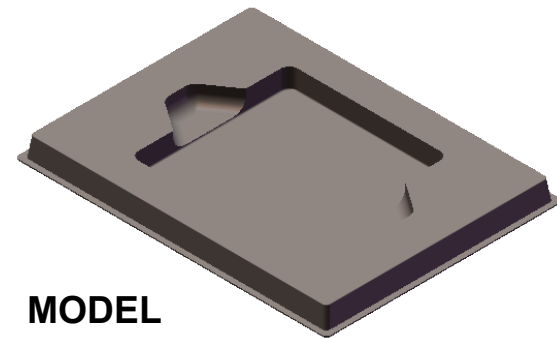
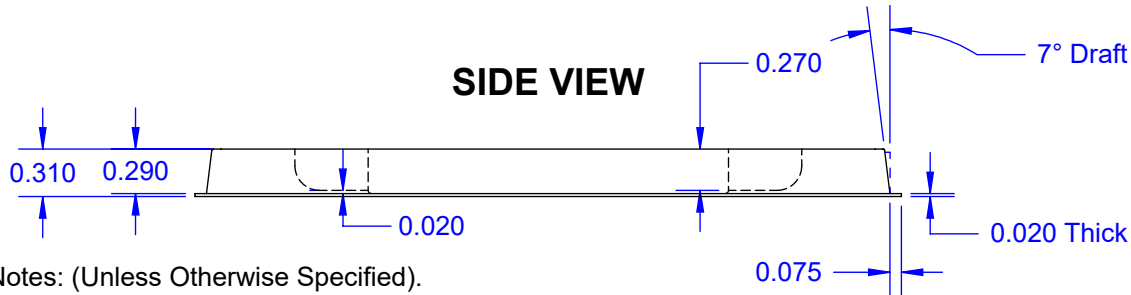
### TOP VIEW



### BOTTOM VIEW



### SIDE VIEW



MODEL

Notes: (Unless Otherwise Specified).

- 1) DIMENSIONS: INCHES.
- 2) MATERIAL: CONDUCTIVE STYRENE.
- 3) SURFACE RESISTIVITY <math>< 10^4 \Omega</math>.

**TopLine®**

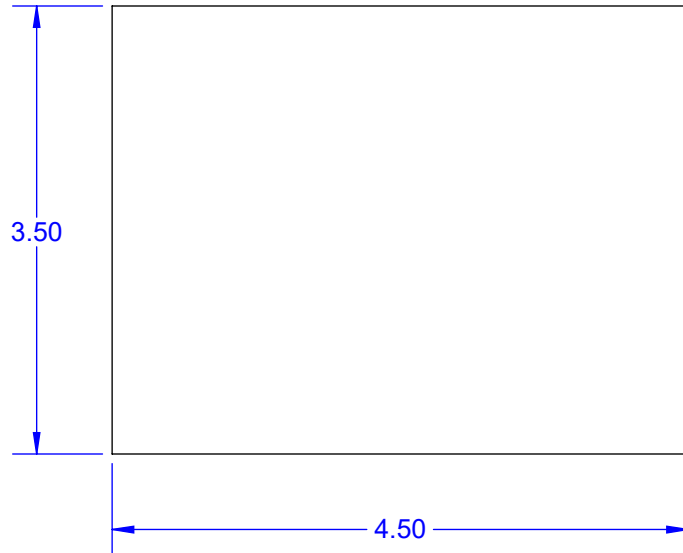
TITLE CCGA TRAY INSERT  
FOR 4.625 x 3.5 HINGE BOX

SCALE	SIZE	DRAWING NO.	REV
2:2.5	A	140110	A

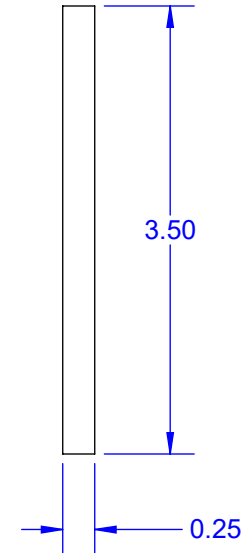
DO NOT SCALE DRAWING

SHEET 7 OF 13

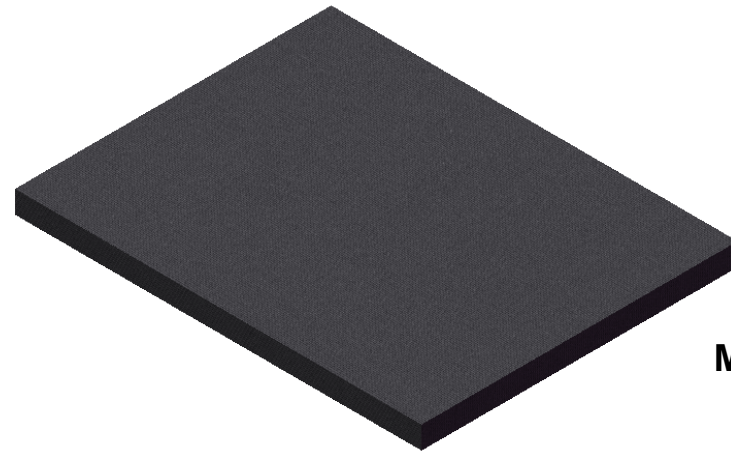
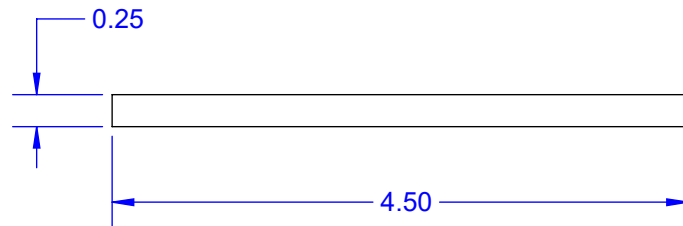
### TOP



### EDGE



### SIDE



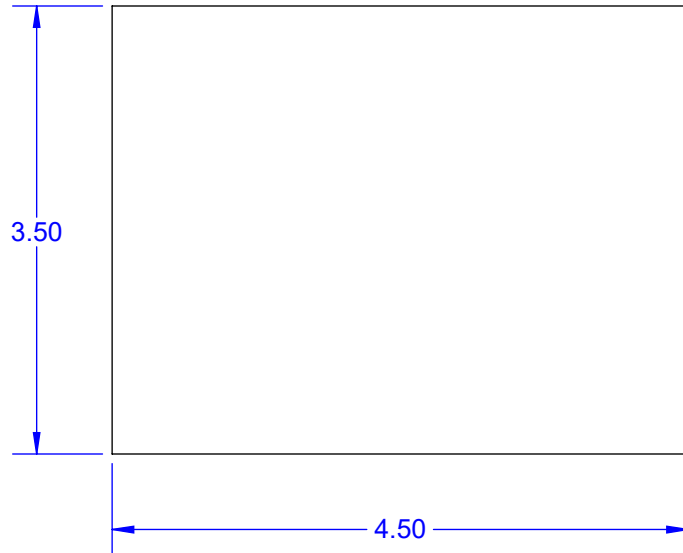
**MODEL**

- Notes: (Unless Otherwise Specified).
- 1) SURFACE RESISTIVITY:  $10^5 \sim 10^6 \Omega$
  - 3) DENSITY 1.7 PFC Min.
  - 4) DIMENSIONS IN INCHES.

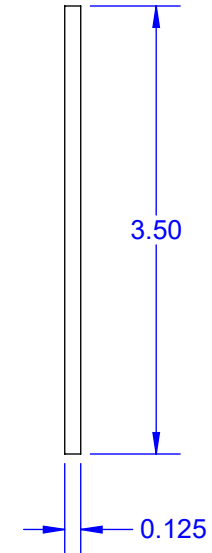
<b>TopLine<sup>®</sup></b>			
TITLE		EC1-FOAM-SOFT-.25-A LOW DENSITY FOAM	
SCALE	SIZE	DRAWING NO.	REV
1:1.5	A	090003	A
DO NOT SCALE DRAWING			SHEET 8 OF 13



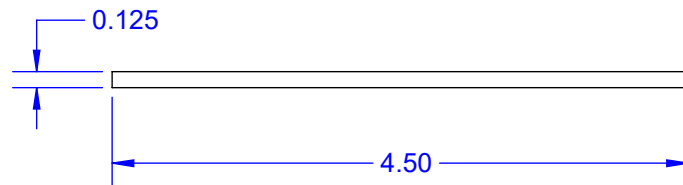
### TOP



### EDGE



### SIDE

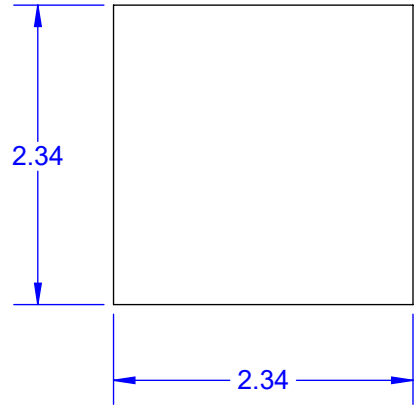


### MODEL

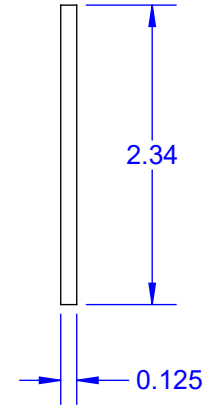
- Notes: (Unless Otherwise Specified).
- 1) SURFACE RESISTIVITY:  $10^5 \sim 10^6 \Omega$
  - 3) DENSITY 1.7 PFC Min.
  - 4) DIMENSIONS IN INCHES.

<b>TopLine<sup>®</sup></b>			
TITLE    EC1-FOAM-SOFT-.125-A LOW DENSITY FOAM			
SCALE 1:1.5	SIZE A	DRAWING NO. 090006	REV A
DO NOT SCALE DRAWING			SHEET 9 OF 13

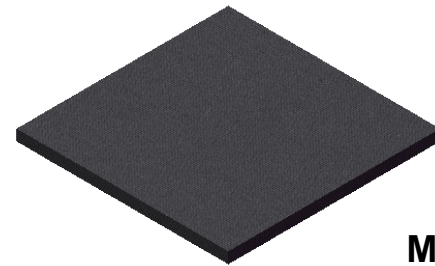
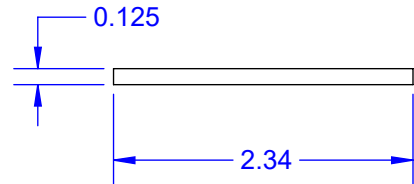
**TOP**



**EDGE**



**SIDE**

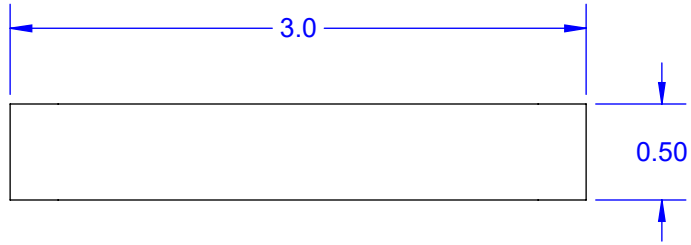


**MODEL**

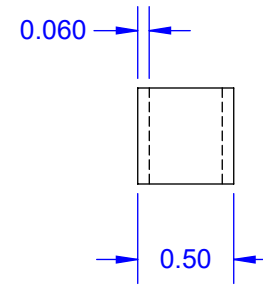
- Notes: (Unless Otherwise Specified).
- 1) SURFACE RESISTIVITY:  $10^5 \sim 10^6 \Omega$ .
  - 2) SOFT CONDUCTIVE FOAM.
  - 3) DENSITY 1.7 PFC Min.

<b>TopLine®</b>			
TITLE		LOW DENSITY FOAM FOAM-SOFT-2.34A	
SCALE	SIZE	DRAWING NO.	REV
1:1.5	A	090011	A
DO NOT SCALE DRAWING			SHEET 10 OF 13

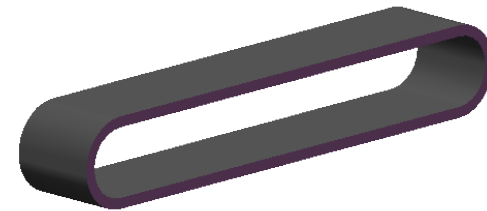
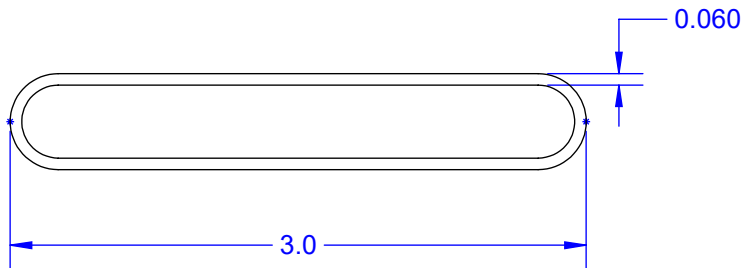
### TOP



### EDGE



### SIDE



### MODEL

Notes: (Unless Otherwise Specified).

1) SURFACE RESISTIVITY:  $10^5 \sim 10^6$ .

2) DIMENSIONS IN INCHES (RESTING POSITION).

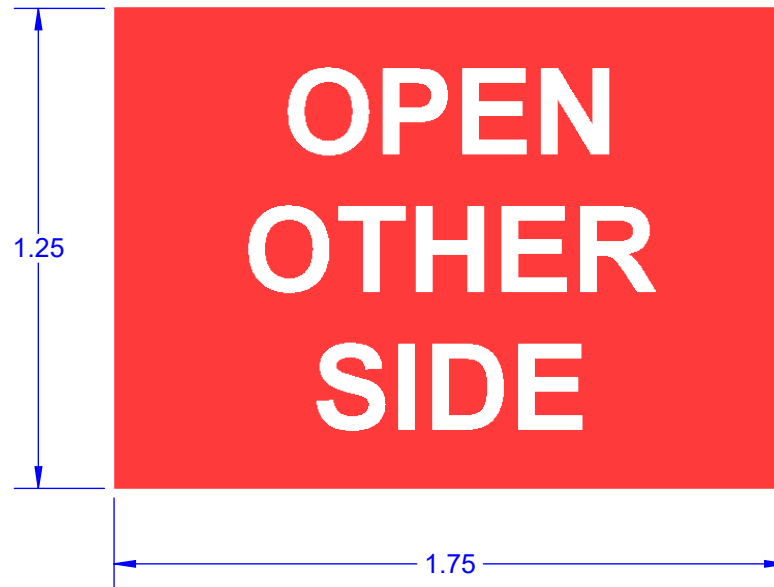
**TopLine**<sup>®</sup>

TITLE RUBBER BAND-3.0-C  
BLACK CONDUCTIVE

SCALE 1:1	SIZE A	DRAWING NO. 090005	REV A
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DO NOT SCALE DRAWING

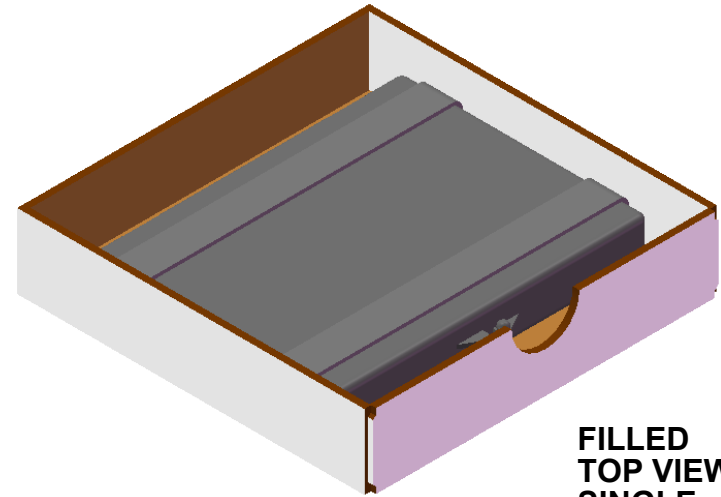
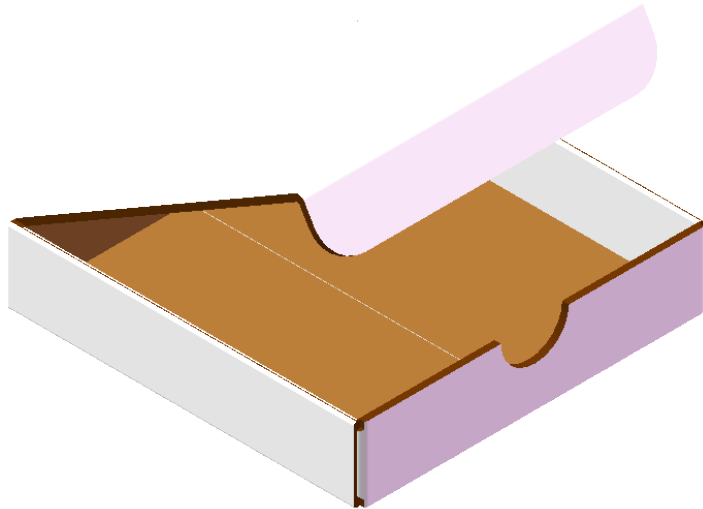
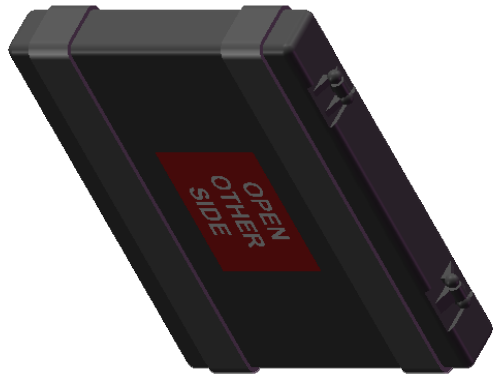
SHEET 11 OF 13



Notes: (Unless Otherwise Specified).

1. DIMENSIONS INCHES.
2. MATERIAL: PAPER LABEL WITH ADHESIVE.
3. COLOR: RED.
4. PURPOSE: IDENTIFY BOTTOM OF HINGE BOX.

<b>TopLine®</b>			
TITLE		LABEL FOR BOTTOM OF HINGE BOX	
SCALE	SIZE	DRAWING NO.	REV
2:1	A	090009	A
DO NOT SCALE DRAWING			SHEET 12 OF 13



**FILLED  
TOP VIEW  
SINGLE**

Notes: (Unless Otherwise Specified).

1. DIMENSIONS INCHES.
2. MEASUREMENT INCLUDES RUBBER BANDS.
3. BOX SIZE SUBJECT TO CHANGE.

**TopLine®**

TITLE CCGA TRAY BOX CARRIER  
CARTON

SCALE 1:2	SIZE A	DRAWING NO. 900001	REV A
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DO NOT SCALE DRAWING

SHEET 13 OF 13