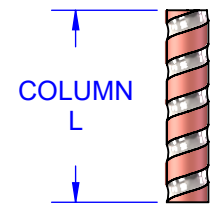
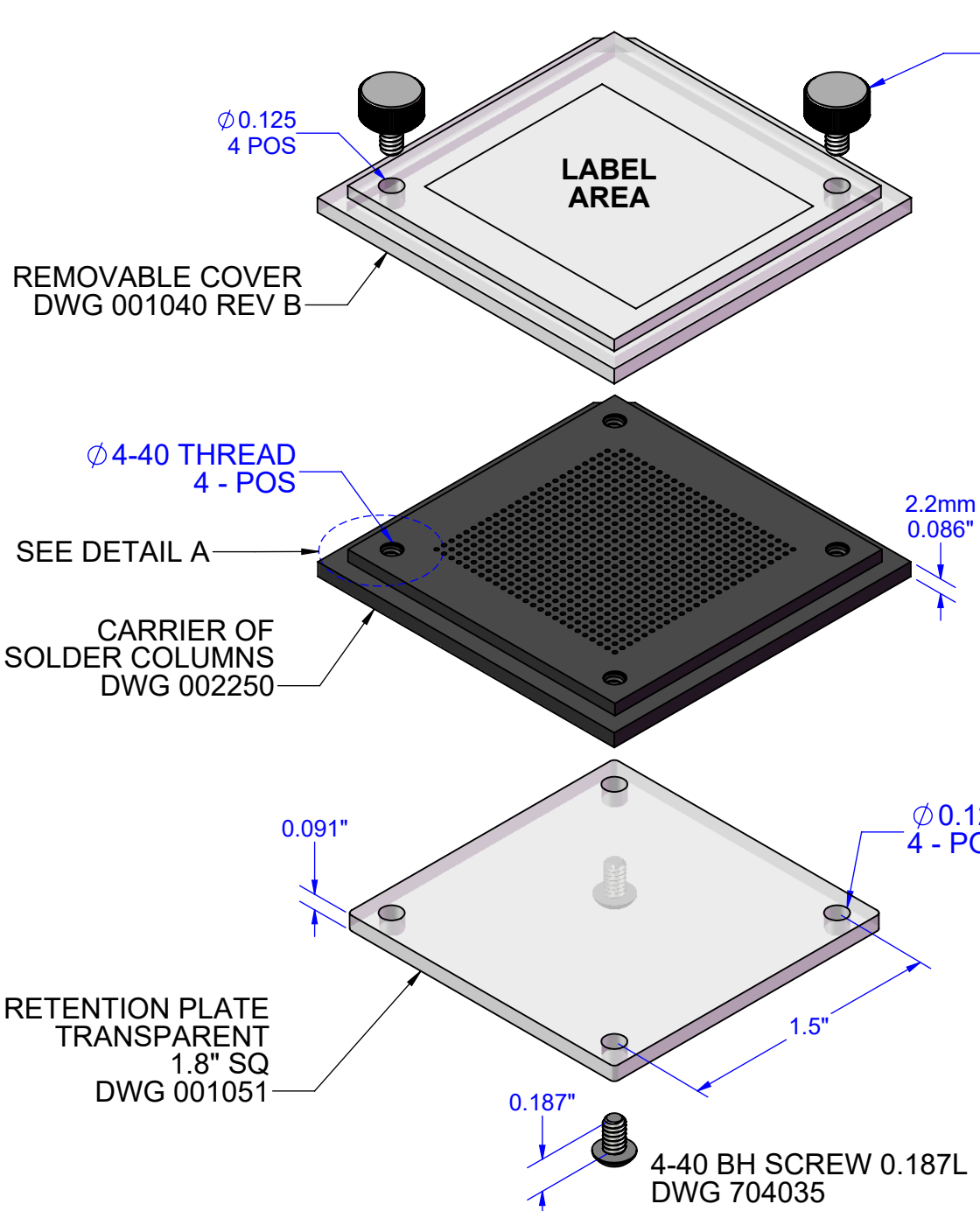
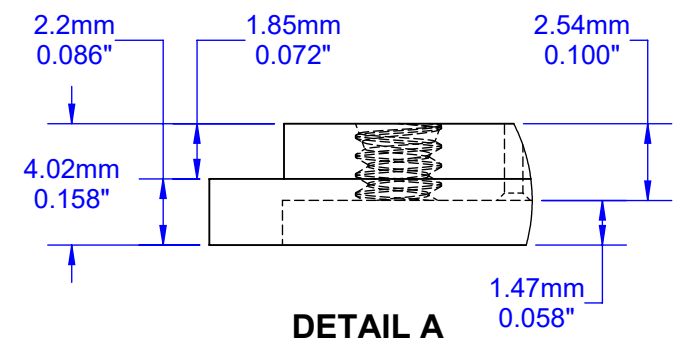


ASSEMBLY EXPLODED VIEW FLIP-PACK® SYSTEM

U.S. PATENT No.
9,108,262 and 9,629,259



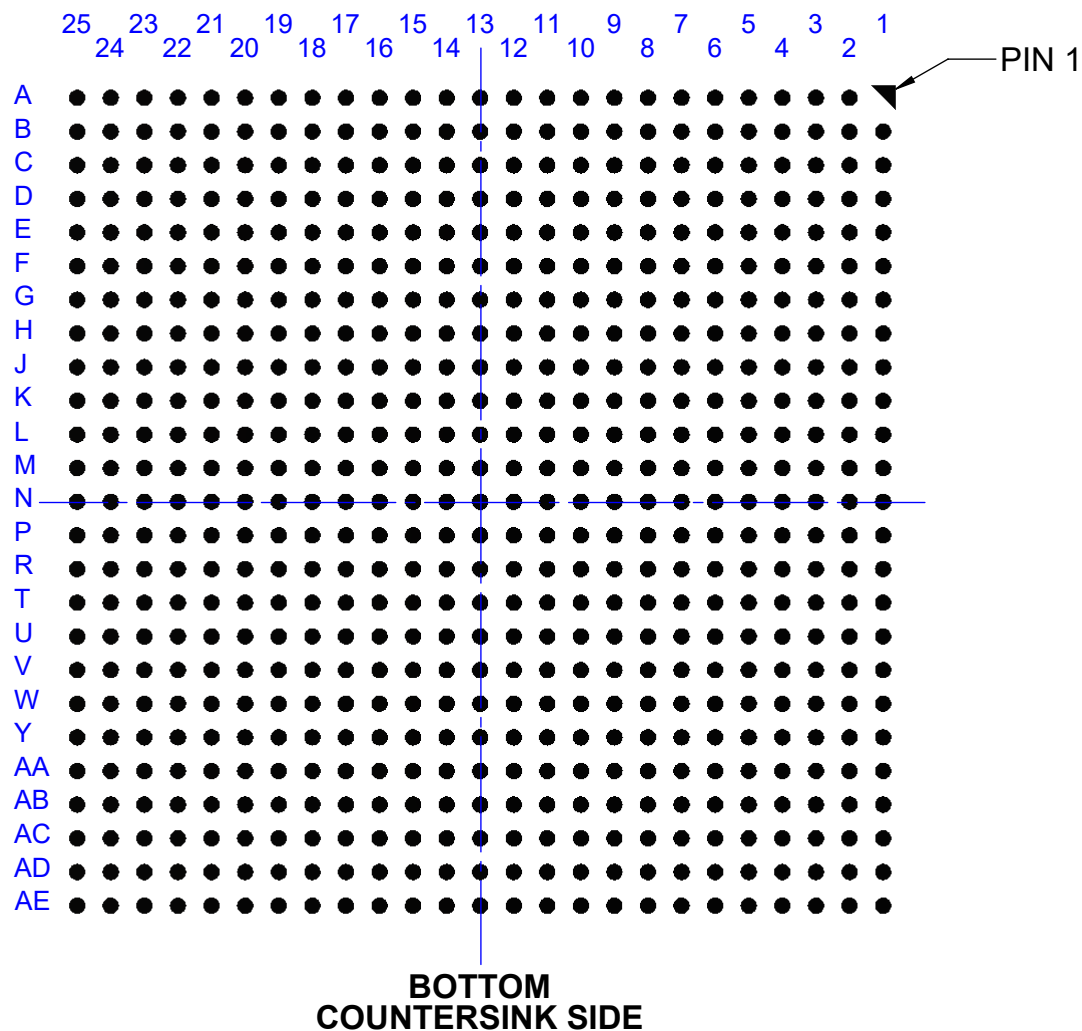
DIMENSION TABLE			
H	L MAX	W	DWG
4.02mm 0.158"	2.54mm 0.100"	1.82mm 0.072"	120254



APPROVALS	DATE	TopLine®			
DRAWN T. Au	9/5/2022				
ENG M. Hart	9/5/2022	TITLE F624A FLIP PACK® CCGA COLUMN CARRIER			
MFG		SCALE 1.25:1	SIZE A	DRAWING NO. 002251	REV A
QA		DO NOT SCALE DRAWING			SHEET 1 OF 11
CUST					
REVISED					

PART NUMBER TABLE

FLIP-PACK®	Pins	Pitch	Matrix	COLUMN					Empty DWG	Filled DWG
				Alloy	Construction	Plating	Ø Dia	Length		
FP83C624F20x100A	624	1.27mm	25x25	Pb80	Cu Ribbon	SnPb	0.51mm	2.54mm	002250	832251
FP83C624F22x100A	624	1.27mm	25x25	Pb80	Cu Ribbon	SnPb	0.56mm	2.54mm	002252	832252



EXAMPLES OF COLUMNS

FP83



Pb80/Sn20
Cu RIBBON

FP90



Pb90/Sn10

TopLine®

TITLE F624A FLIP PACK®
CCGA COLUMN CARRIER

SCALE NONE	SIZE A	DRAWING NO. 002251	REV A
---------------	-----------	-----------------------	----------

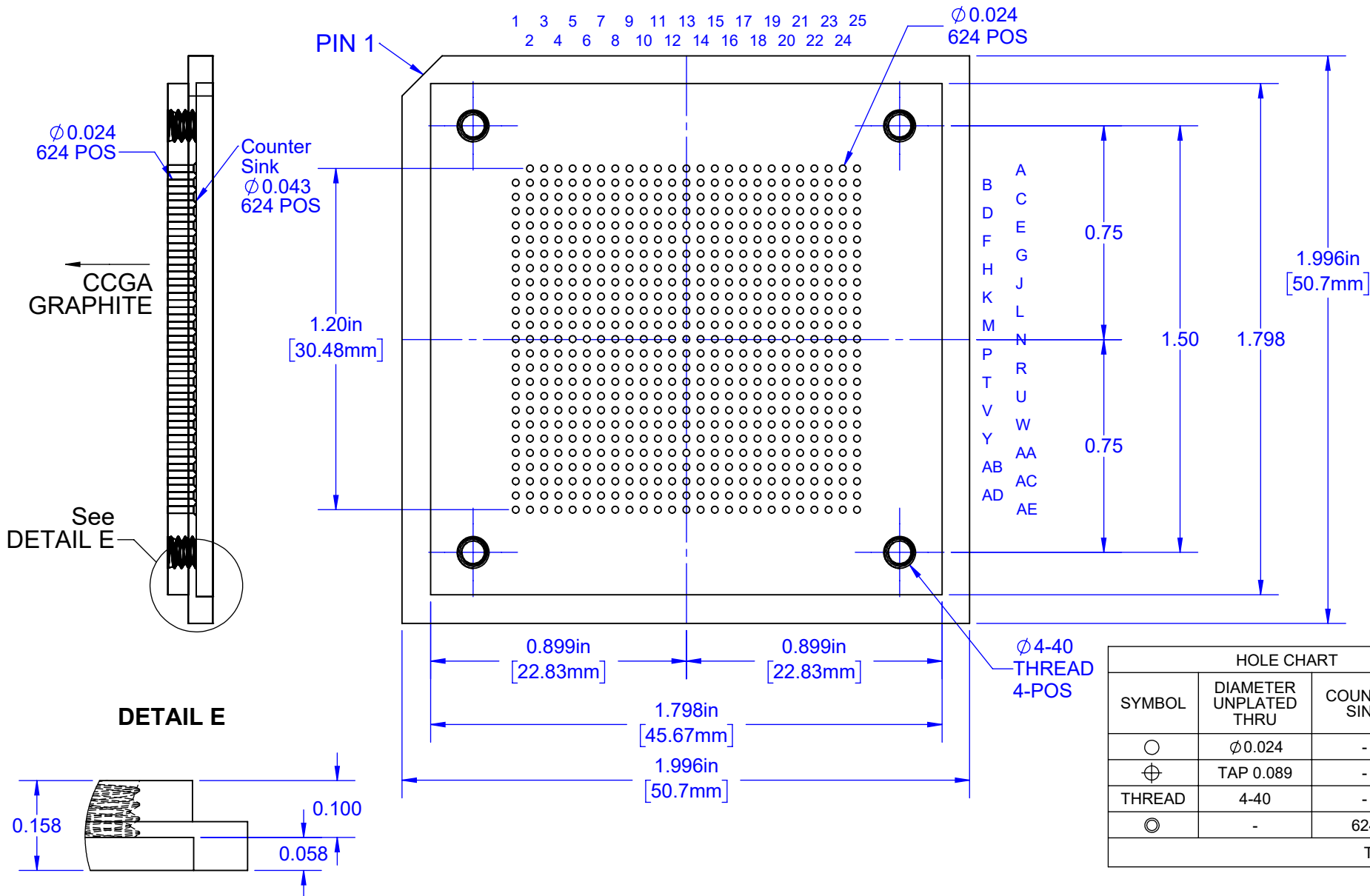
DO NOT SCALE DRAWING

SHEET 2 OF 11

SIDE

TOP VIEW

TOP VIEW



Notes: (Unless Otherwise Specified).
 1) MATERIAL: BLACK PLASTIC, CONDUCTIVE.
 2) DIMENSIONS : INCHES [MM].

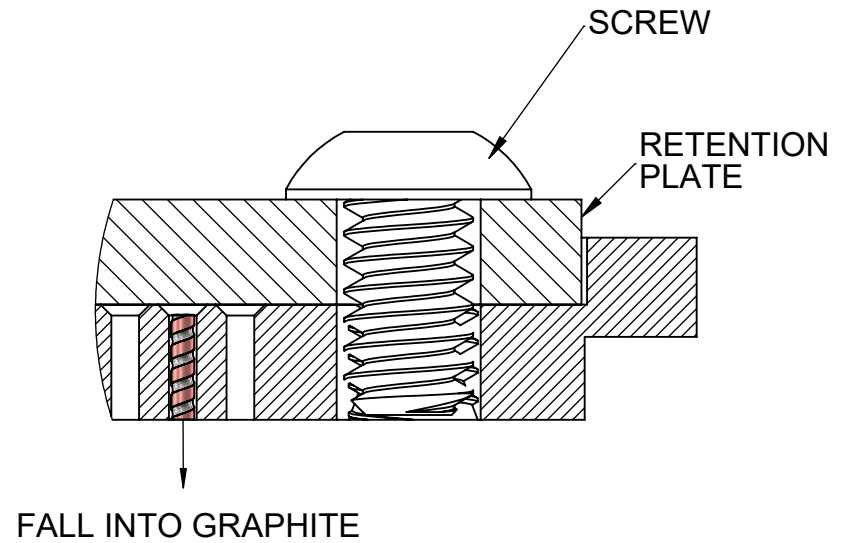
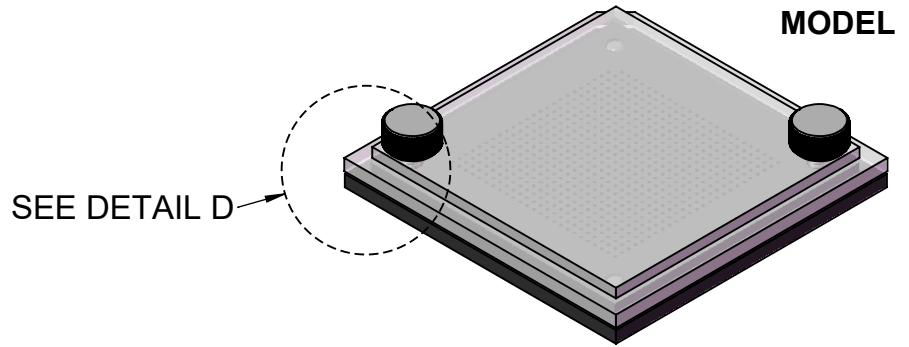
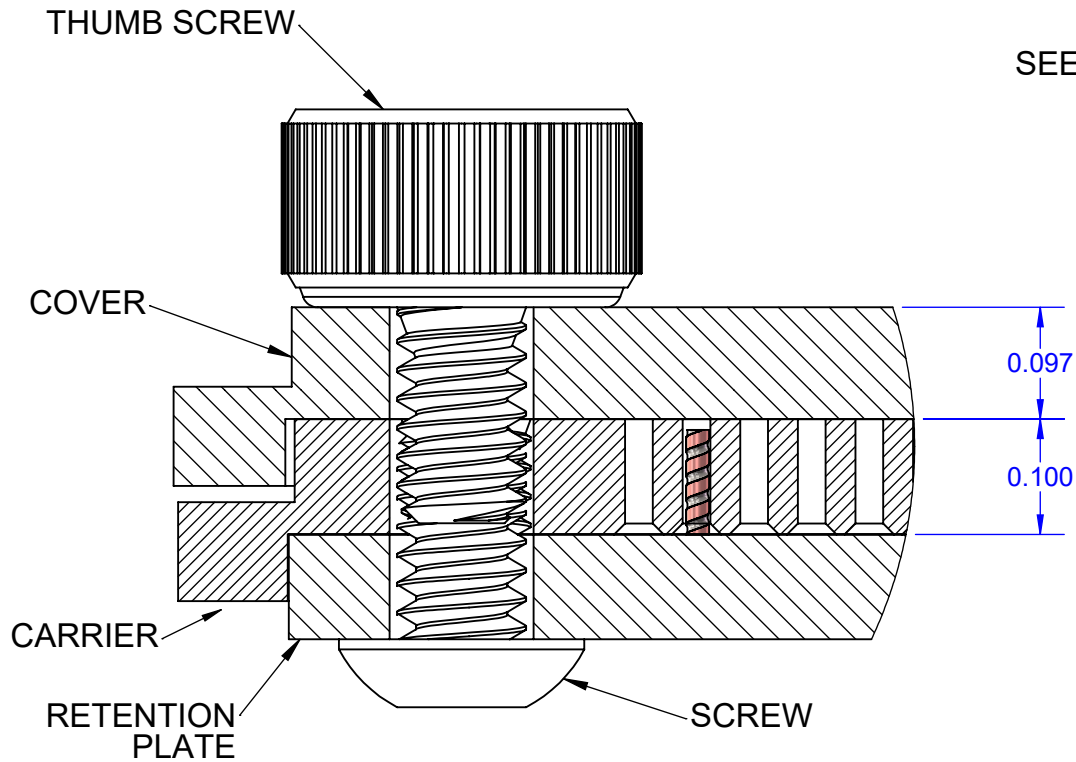
TopLine®

TITLE F624A FLIP PACK®
CCGA COLUMN CARRIER

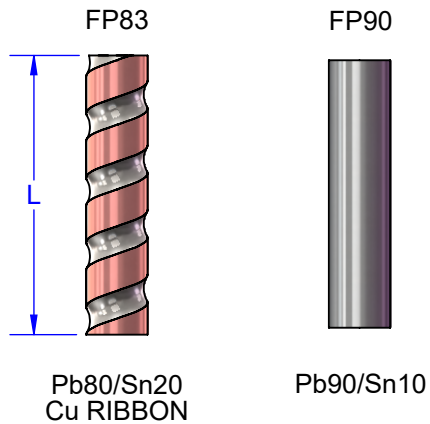
SCALE 2:1	SIZE A	DRAWING NO. 001346	REV A
--------------	-----------	-----------------------	----------

DO NOT SCALE DRAWING SHEET 3 OF 11

DETAIL D WITH COVER PLATE



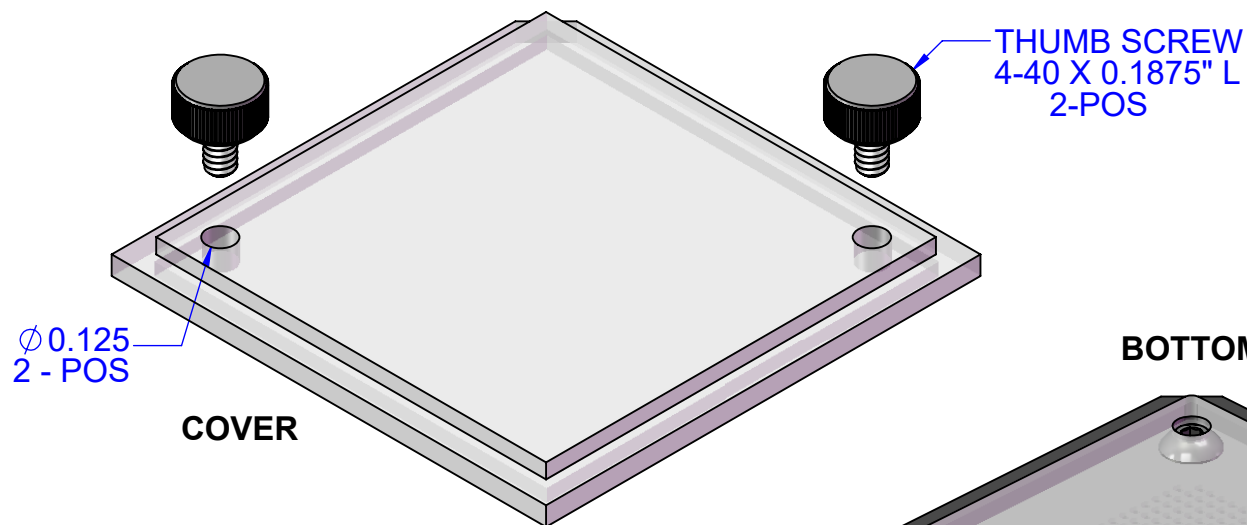
EXAMPLE OF COLUMNS



TopLine®			
TITLE F624A FLIP PACK® CCGA COLUMN CARRIER			
SCALE 7:1	SIZE A	DRAWING NO. 002251	REV A
DO NOT SCALE DRAWING			SHEET 4 OF 11

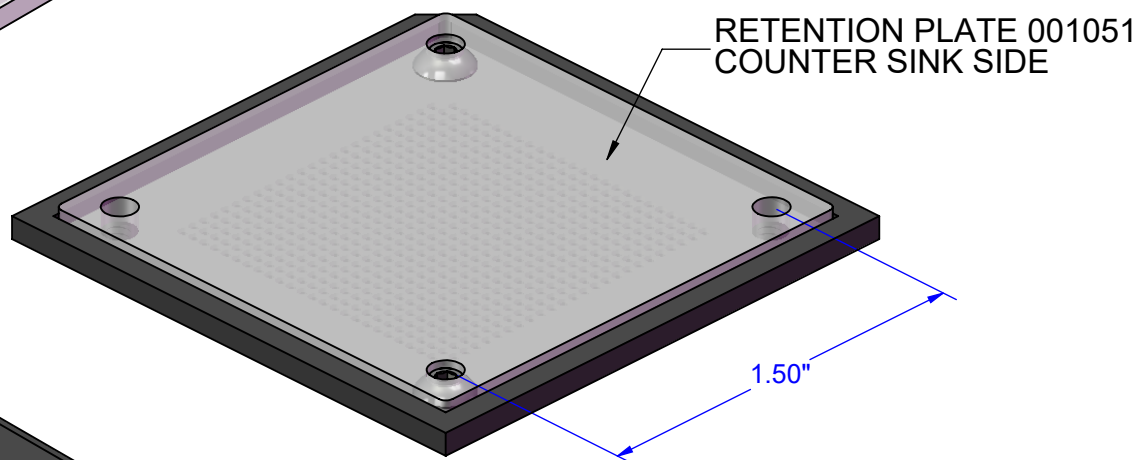
FLIP PACK® MODEL

COVER 001040 REV B



COVER

BOTTOM

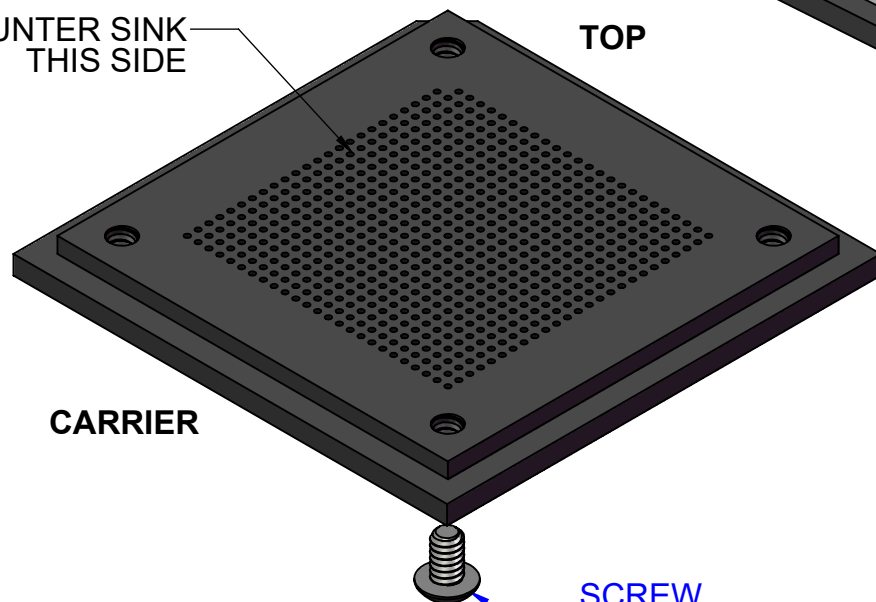


RETENTION PLATE 001051
COUNTER SINK SIDE

1.50"

NON-COUNTER SINK
THIS SIDE

TOP



CARRIER

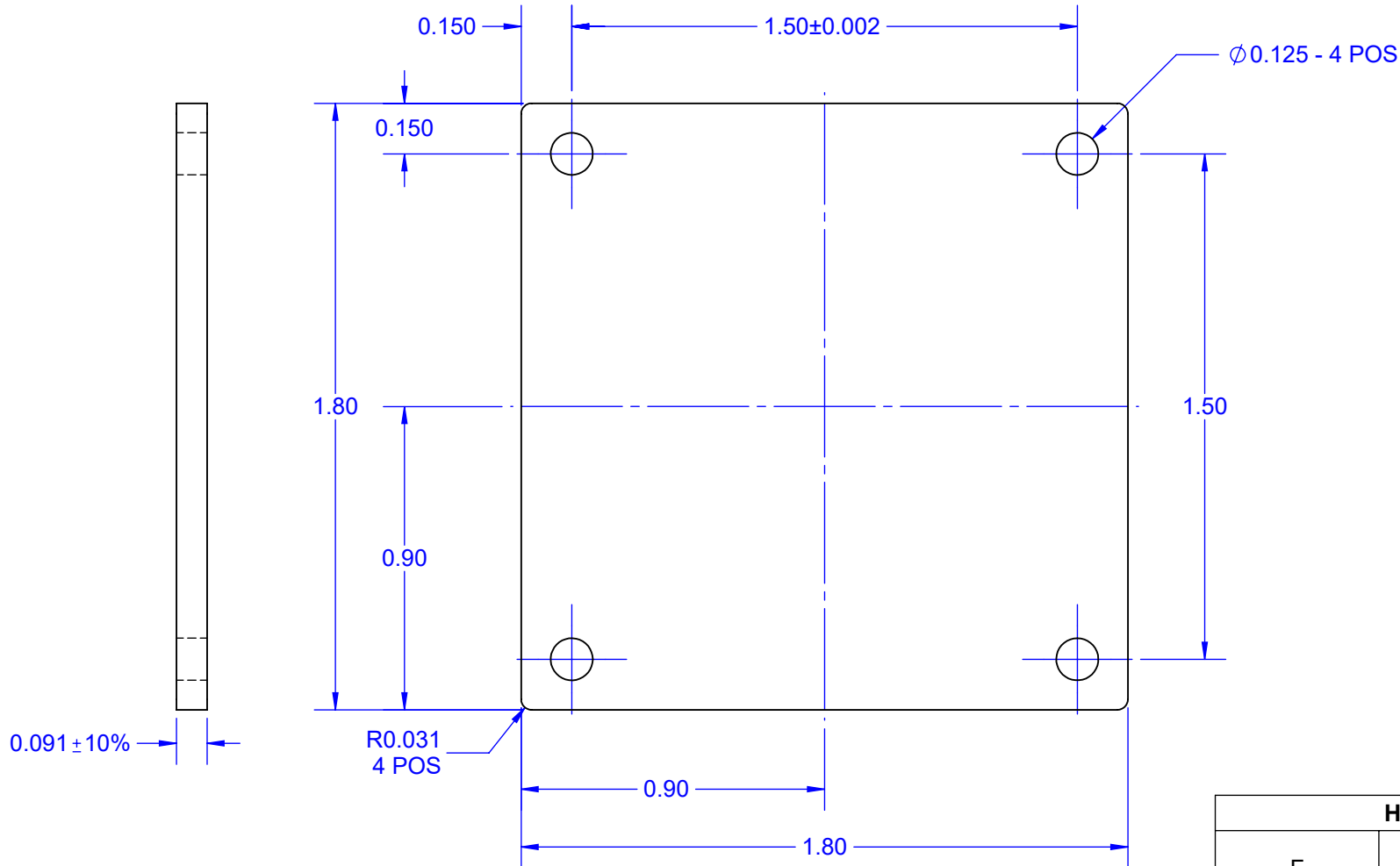
SCREW
4-40 X 0.187" L
2-POS

TopLine®			
TITLE F624A FLIP PACK® CCGA COLUMN CARRIER			
SCALE 2:1	SIZE A	DRAWING NO. 002251	REV A
DO NOT SCALE DRAWING			SHEET 5 OF 11

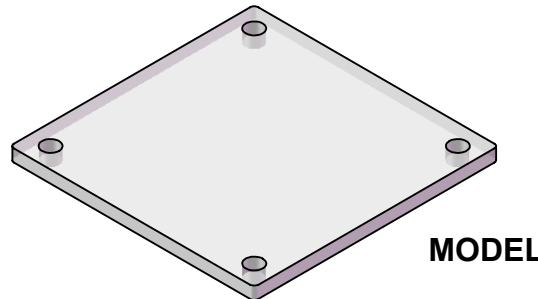
BOTTOM RETENTION PLATE

SIDE VIEW

TOP VIEW



HOLE CHART		
F	DIAMETER UNPLATED	QTY HOLES
+	$\phi 0.125$	4



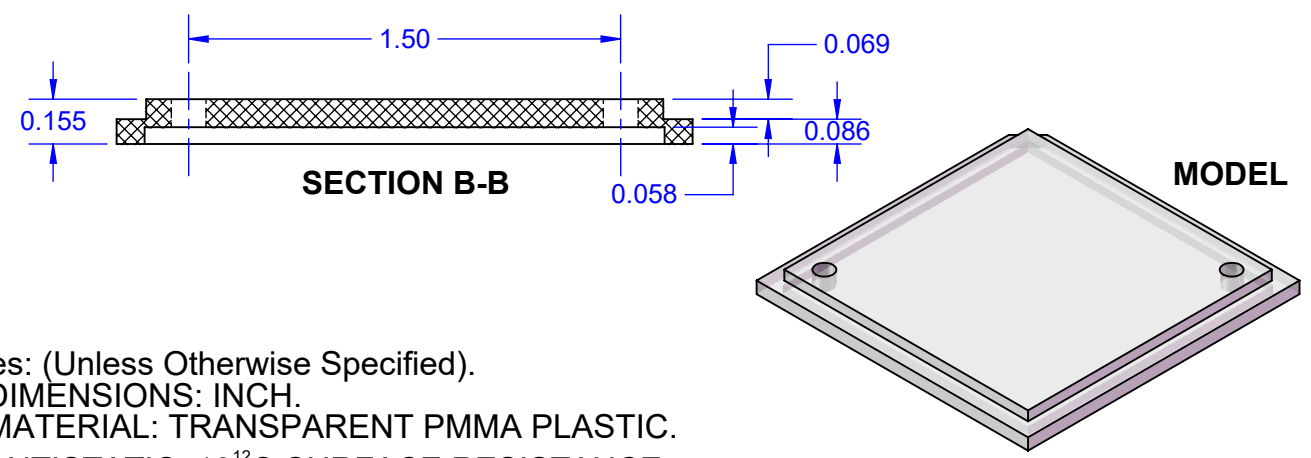
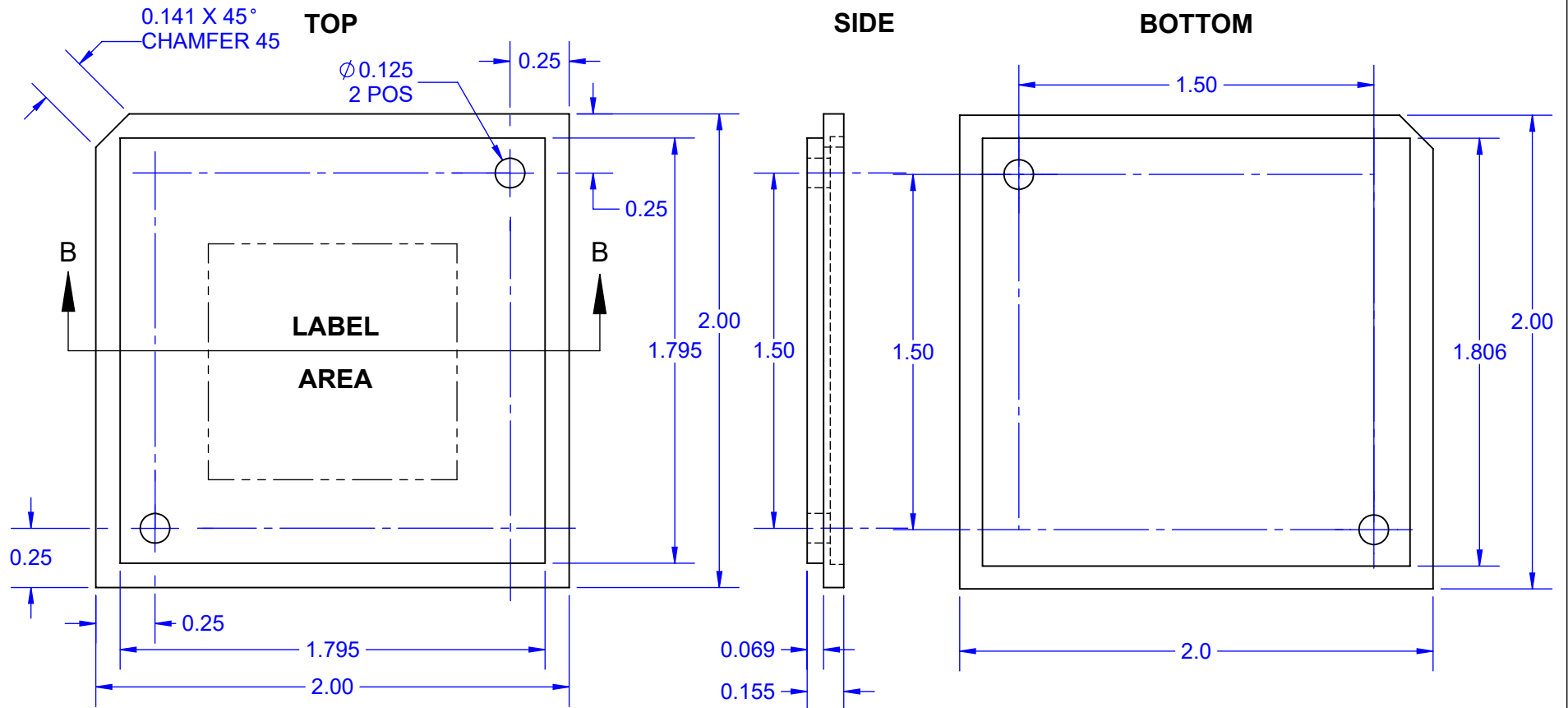
MODEL

NOTES: (Unless Otherwise Specified).

- 1) DIMENSIONS INCH.
- 2) MATERIAL: CLEAR PC-300 POLYCARBONATE.
- 3) STATIC DISIPATIVE $10^6 \sim 10^8 \Omega$. (ESD SAFE).
- 4) HOLE BREAK OUT ALLOWED.

TITLE FP1.8-BOTTOM-1.5B BOTTOM RETENTION PLATE			
SCALE 2:1	SIZE A	DRAWING NO. 001051	REV A
DO NOT SCALE DRAWING			SHEET 6 OF 11

COVER 001040 REV B



HOLE CHART		
SYMBOL	DIAMETER UNPLATED	QTY HOLES
+	Ø0.125	2

- Notes: (Unless Otherwise Specified).
 1) DIMENSIONS: INCH.
 2) MATERIAL: TRANSPARENT PMMA PLASTIC.
 3) ANTISTATIC: $10^{12} \Omega$ SURFACE RESISTANCE.

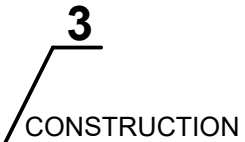
TopLine®			
TITLE FLIP-PACK® TOP COVER 2-INCH 1.50 SPACE			
SCALE 3:2	SIZE A	DRAWING NO. 001040	REV A
DO NOT SCALE DRAWING			SHEET 7 OF 11

FLIP-PACK® PART NUMBERING SYSTEM



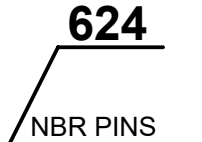
FP = Filled
FN = Empty

8



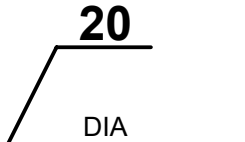
Code	Description
0	Plain Wire
3	Cu Ribbon

C



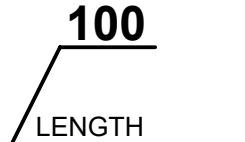
Pins	Matrix
624	25x25

F



Code	DIA
Ø 20 MIL	0.51mm
Ø 22 MIL	0.56mm

X



Code	Length
100 MIL	2.54mm

A



Code	Rev
A	V0

ALLOY

Code	Description
8	Pb80/Sn20
9	Pb90/Sn10

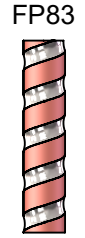
PLATING

Code	Plating
C	Cu Ribbon Sn63/Pb37
U	No Plating

PITCH

Code	Pitch
F	1.27mm

EXAMPLES OF COLUMNS



Pb80/Sn20
Cu RIBBON

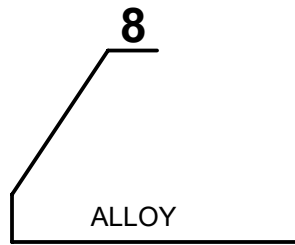


Pb90/Sn10

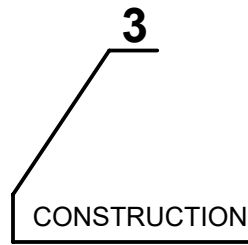
NOTE: COLUMN TO BE TRIMMED TO 2.21mm AFTER ATTACHMENT.

TopLine®			
TITLE F624A FLIP PACK® CCGA COLUMN CARRIER			
SCALE 10:1	SIZE A	DRAWING NO. 002251	REV A
DO NOT SCALE DRAWING			SHEET 8 OF 11

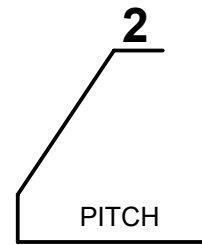
FLIP-PACK® PART NUMBERING SYSTEM



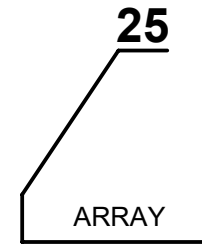
<u>Code</u>	<u>Description</u>
00	Empty
8	Pb80/Sn20
9	Pb90/Sn10



<u>Code</u>	<u>Description</u>
0	Plain Wire
3	Cu Ribbon

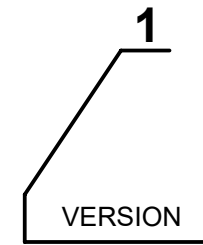


<u>Code</u>	<u>Pitch</u>
2	1.27mm



<u>Code</u>	<u>Matrix</u>
25	25x25

DEPOPULATED
1-PIN



<u>Code</u>	<u>Rev</u>
1	0.51 X 2.54mm
2	0.56 X 2.54mm

EXAMPLES OF COLUMNS

FP83



Pb80/Sn20
Cu RIBBON

FP90



Pb90/Sn10

TopLine®

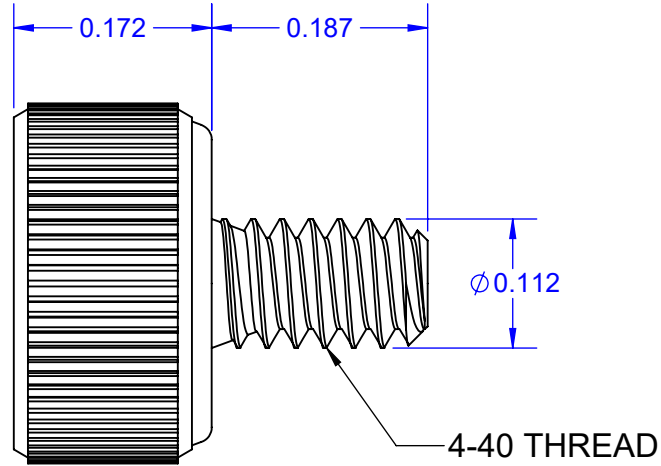
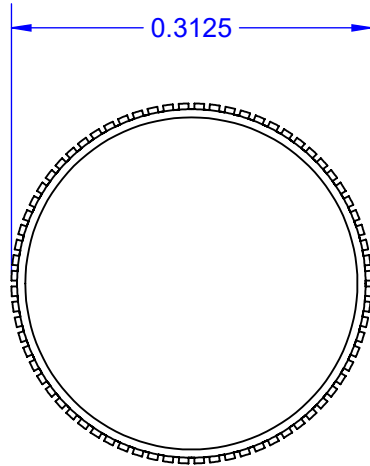
TITLE F624A FLIP PACK®
CCGA COLUMN CARRIER

SCALE	SIZE	DRAWING NO.	REV
10:1	A	002251	A

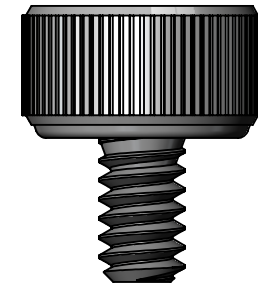
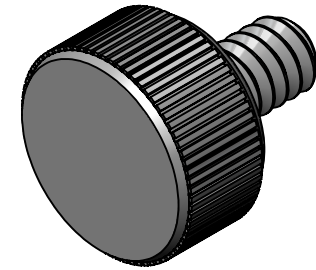
DO NOT SCALE DRAWING

SHEET 9 OF 11

HARDWARE PLASTIC KNURLED HEAD THUMB SCREW



MODELS



- NOTES:**
1. DIMENSIONS INCHES (UNLESS OTHERWISE SPECIFIED).
 2. SHAFT MATERIAL 18-8 STAINLESS STEEL.
 3. HEAD: PLASTIC.
 4. COLOR: BLACK.

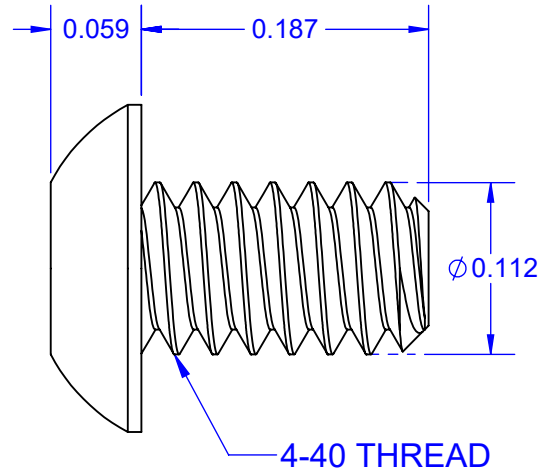
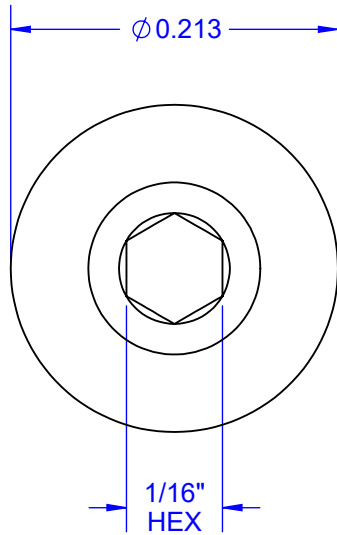
DRILL TABLE

HEAD COLOR	THREAD	MAX OD	TAP DRILL Start Hole	CL HOLE Loose Fit	L SHAFT	DWG
BLACK	4-40	0.112"	0.089"	0.136"	0.187	704018

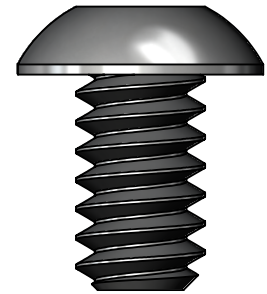
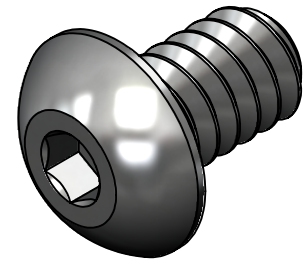
TopLine®

TITLE KNURL THUMB SCREW 4-40 PLASTIC HEAD			
SCALE 6:1	SIZE A	DRAWING NO. 704018	REV A

BUTTON HEAD SCREW




MODELS



- NOTES: (UNLESS OTHERWISE SPECIFIED)
1. DIMENSIONS INCHES.
 2. MATERIAL: SEE TABLE.
 3. COLOR: SEE TABLE.

DRILL TABLE						
MATERIAL	COLOR	THREAD	MAX OD	TAP DRILL Start Hole	L	DWG
8-18	STAINLESS	4-40	0.112"	0.089"	0.187"	704035

			
TITLE BUTTON HEAD CAP SCREW 4-40x .187" (1/16 HEX)			
SCALE 8:1	SIZE A	DRAWING NO. 704035	REV A
DO NOT SCALE DRAWING			SHEET 11 OF 11