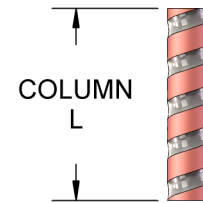
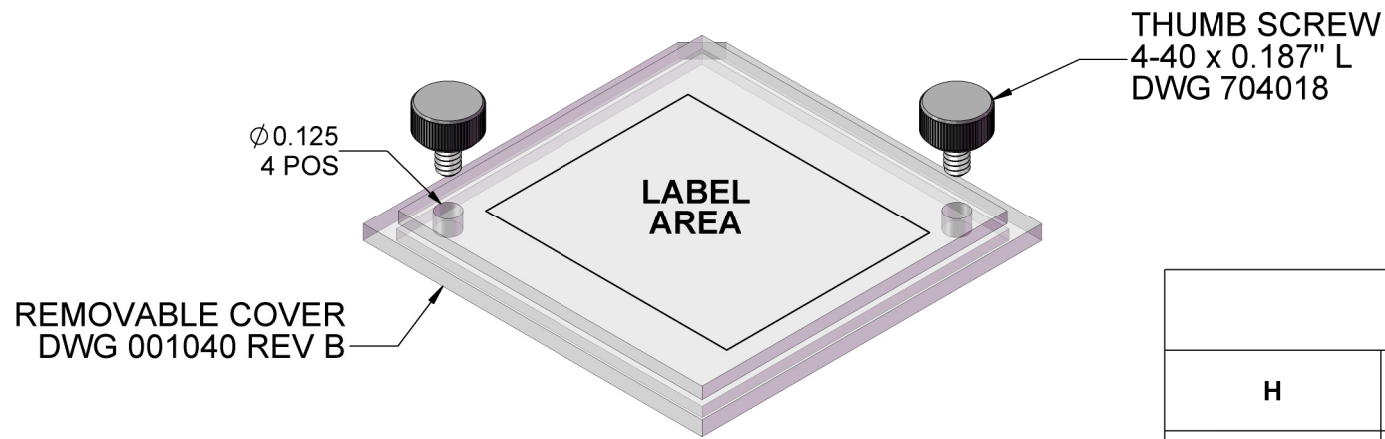
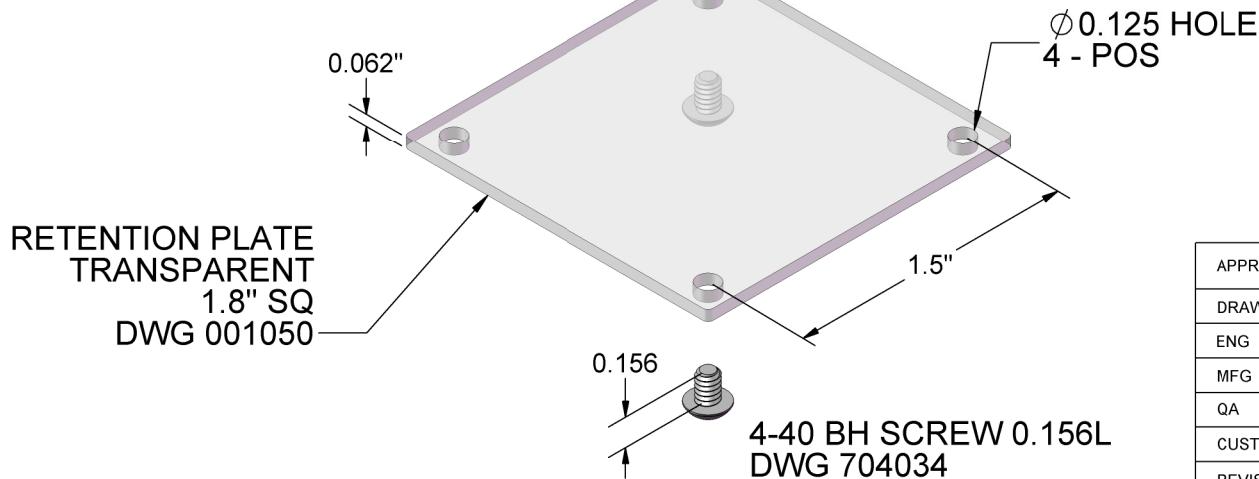
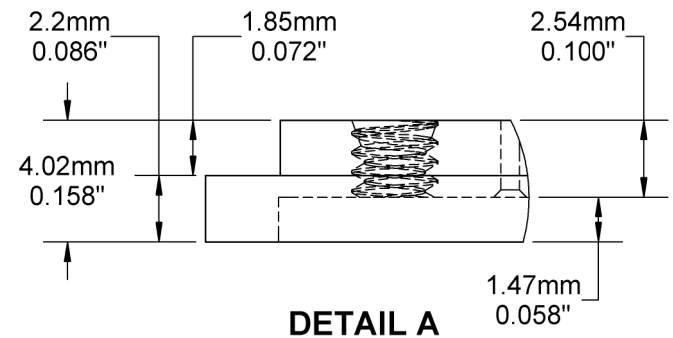
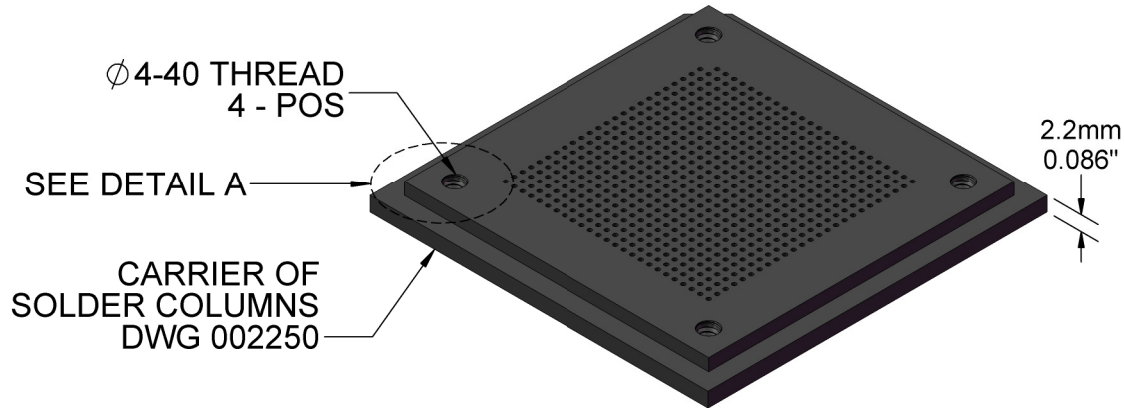


# ASSEMBLY EXPLODED VIEW FLIP-PACK<sup>®</sup> SYSTEM

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



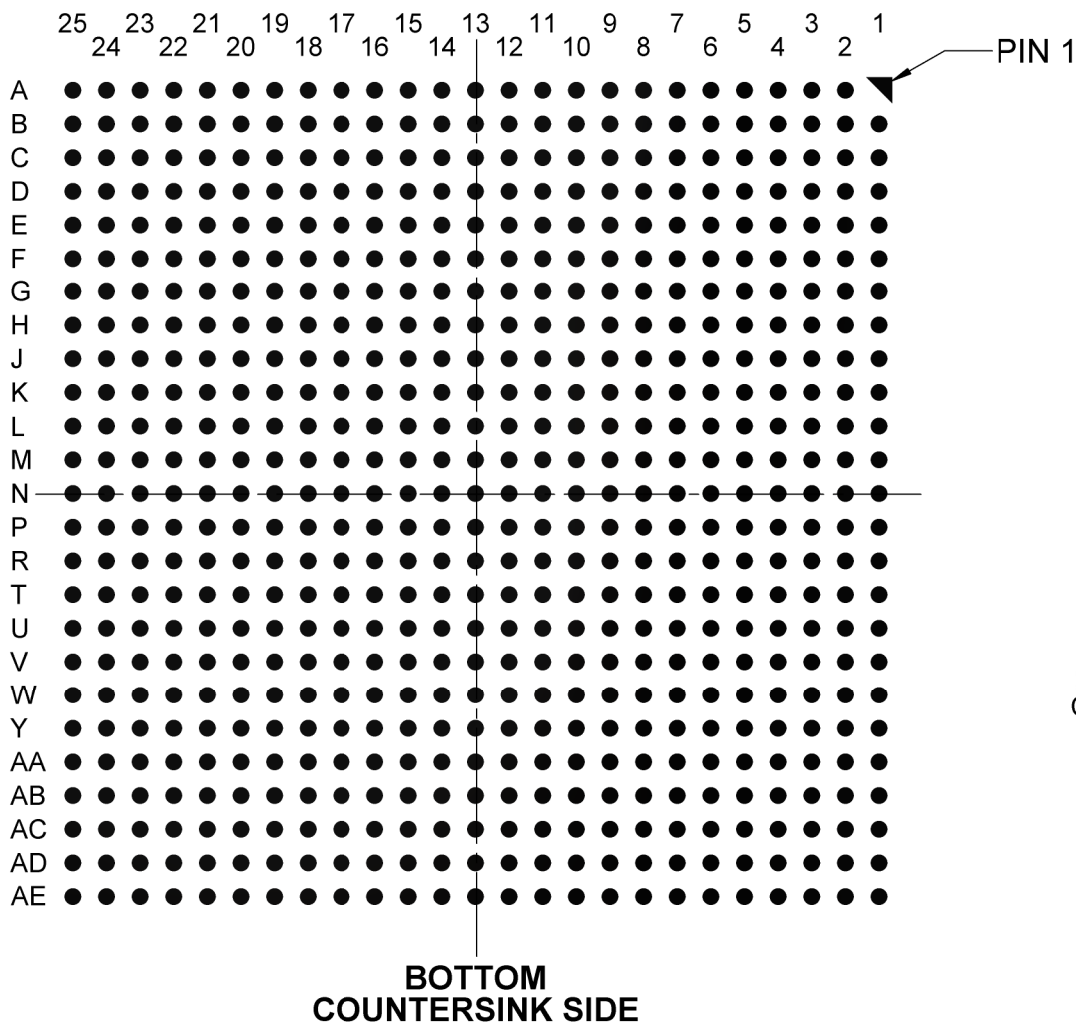
DIMENSION TABLE			
H	L MAX	W	DWG
4.02mm 0.158"	2.54mm 0.100"	1.82mm 0.072"	120254



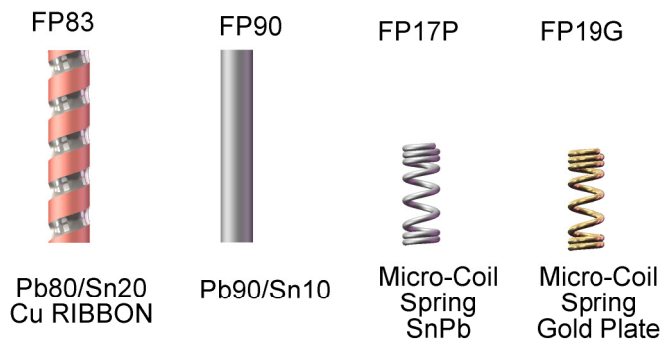
APPROVALS	DATE	<b>TopLine<sup>®</sup></b>			
DRAWN T. Au	3/5/2018				
ENG M. Hart	3/5/2018	TITLE FP624A FLIP PACK			
MFG		SCALE	SIZE	DRAWING NO.	REV
QA		1.25:1	A	002250	B
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 12
REVISED					

### PART NUMBER TABLE

FLIP-PACK®	Pins	Pitch	Matrix	COLUMN					Empty DWG	Filled DWG
				Alloy	Construction	Plating	Ø Dia	Length		
FP83C624F20x91A FP83C624F20x100A	624	1.27mm	25x25	Pb80	Cu Ribbon	SnPb	0.51mm	2.31mm 2.54mm	002250	832250 832251
FP17P624F20x50A FP19G624F20x50A	624	1.27mm	25x25	BeCu	Micro Coil	SnPb Ni-Au	0.51mm	1.27mm	002250	172250 192250



#### EXAMPLES OF COLUMNS

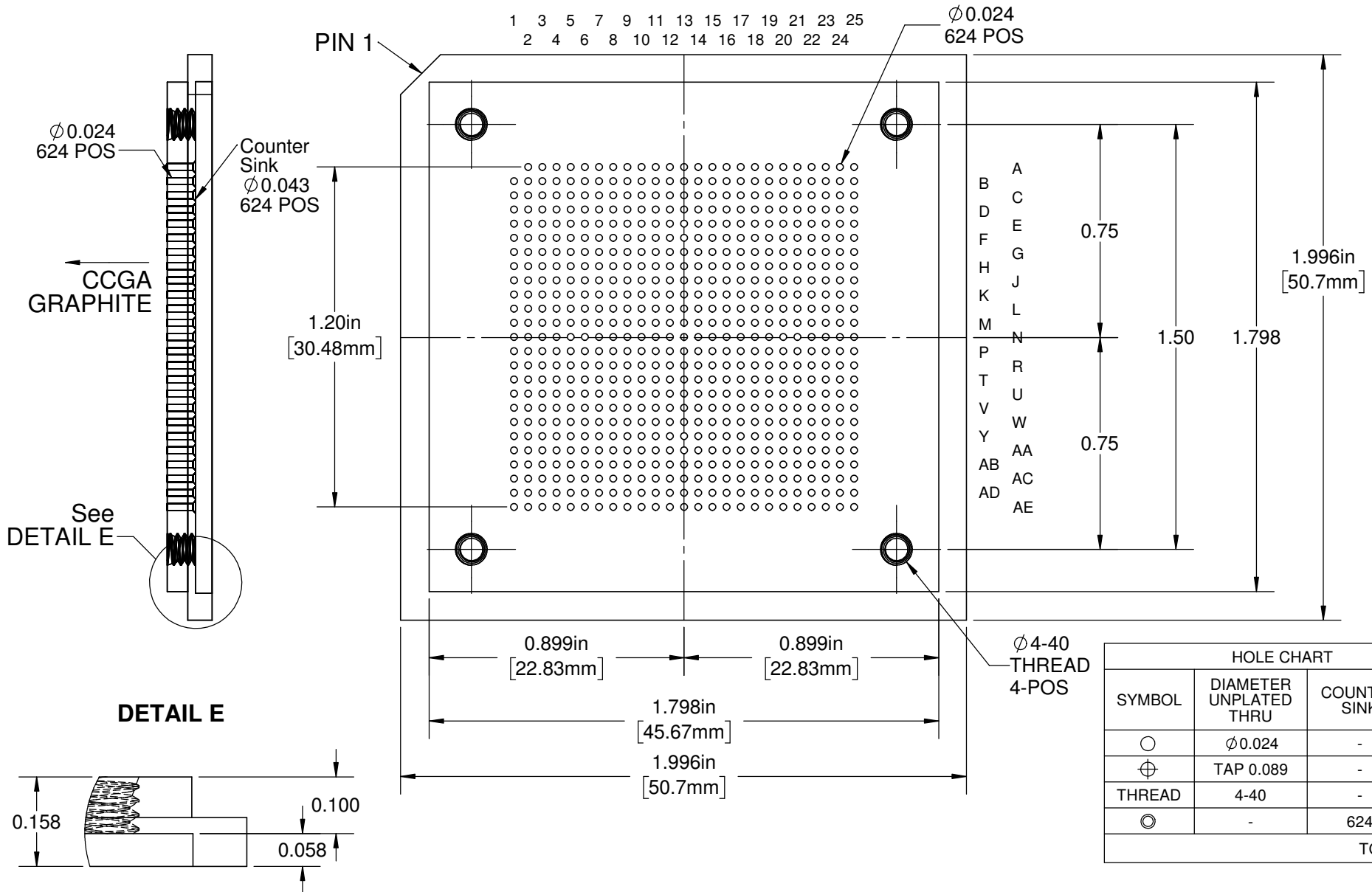


<b>TopLine®</b>			
TITLE FP624A FLIP PACK			
SCALE NONE	SIZE A	DRAWING NO. 002250	REV B
DO NOT SCALE DRAWING			SHEET 2 OF 12

**SIDE**

**TOP VIEW**

**TOP VIEW**



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

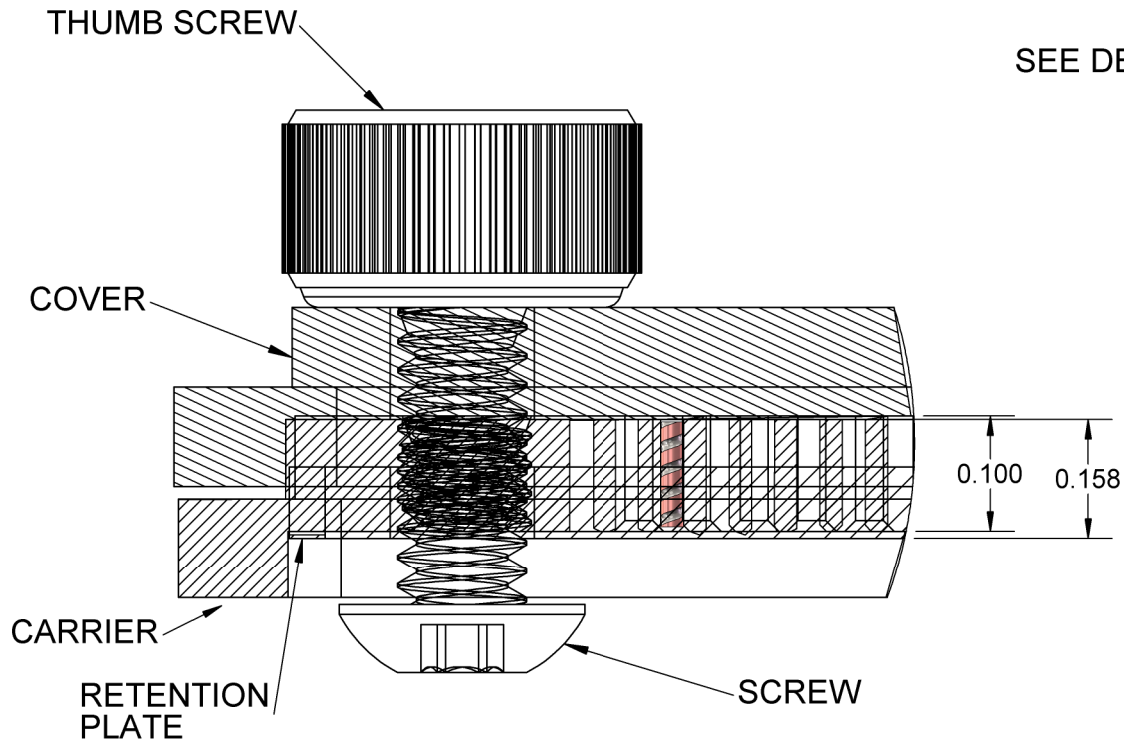
**TopLine®**

TITLE FP624A FLIP PACK

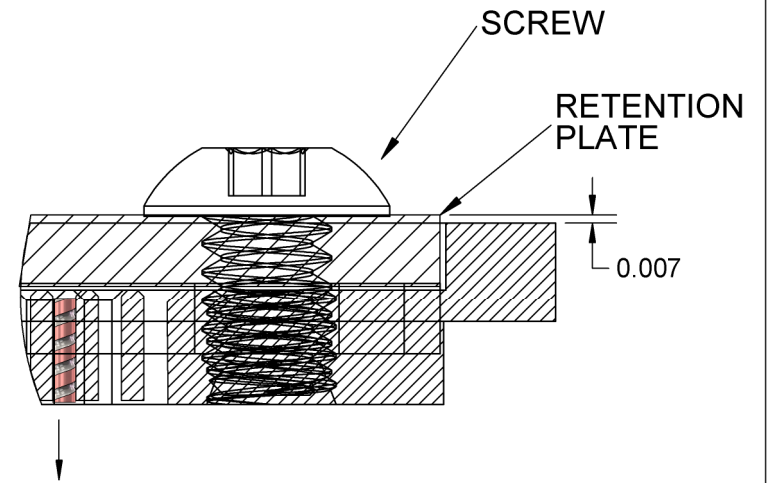
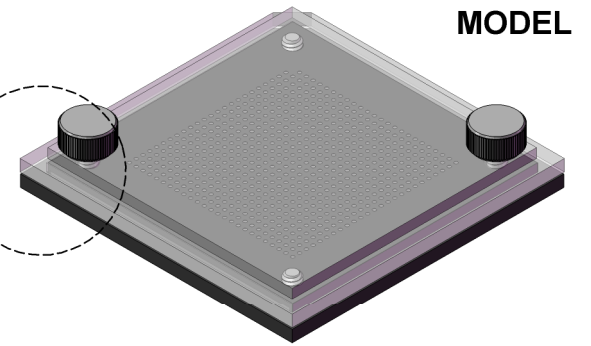
SCALE 2:1	SIZE A	DRAWING NO. 001346	REV B
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DO NOT SCALE DRAWING SHEET 3 OF 12

### DETAIL D WITH COVER PLATE

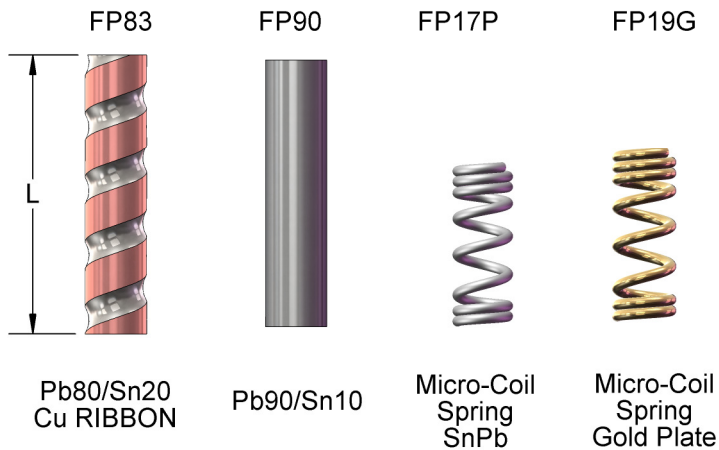


SEE DETAIL D



FALL INTO GRAPHITE

### EXAMPLE OF COLUMNS

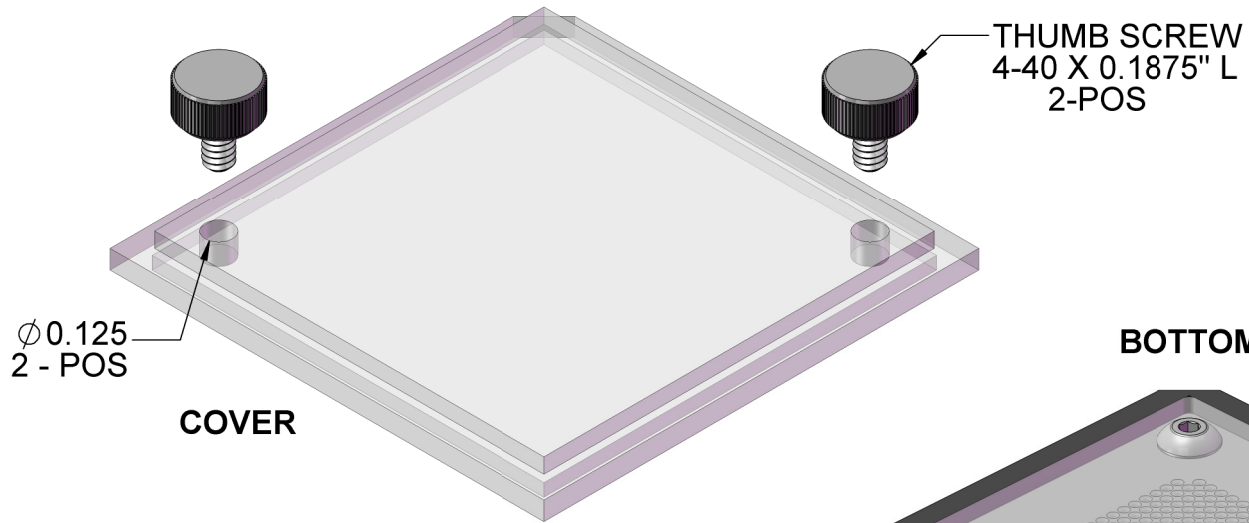


**TopLine**<sup>®</sup>

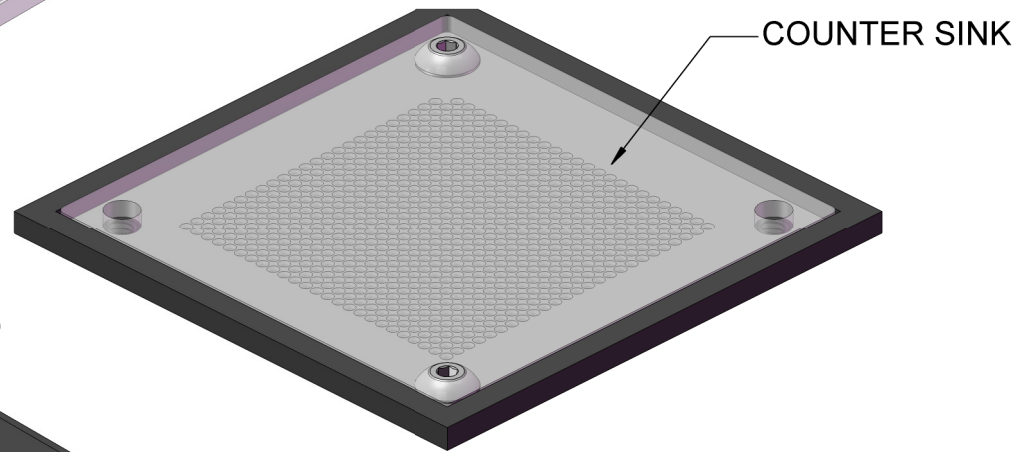
TITLE			
FP624A FLIP PACK			
SCALE	SIZE	DRAWING NO.	REV
7:1	A	002250	B
DO NOT SCALE DRAWING			SHEET 4 OF 12

# FLIP PACK<sup>®</sup> MODEL

COVER 001040 REV B

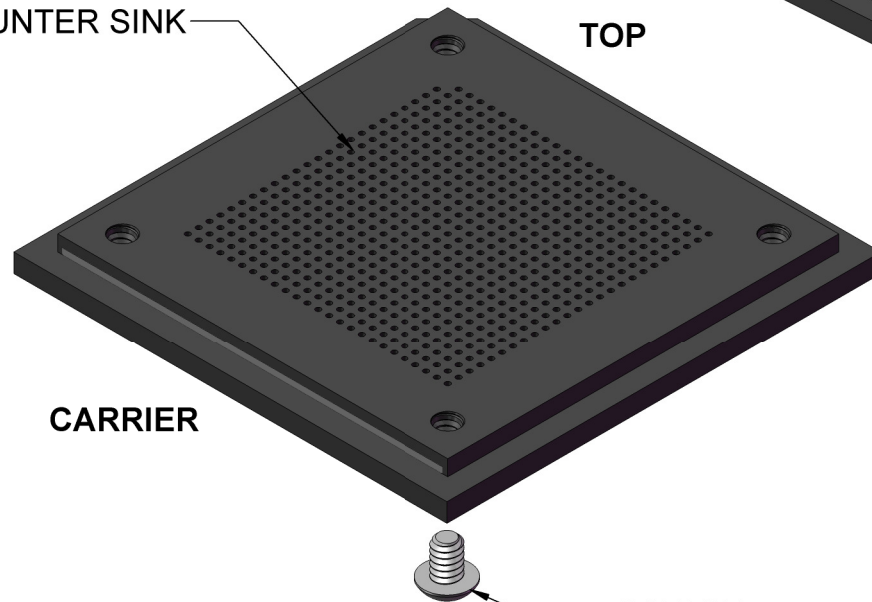


BOTTOM



NON-COUNTER SINK

TOP



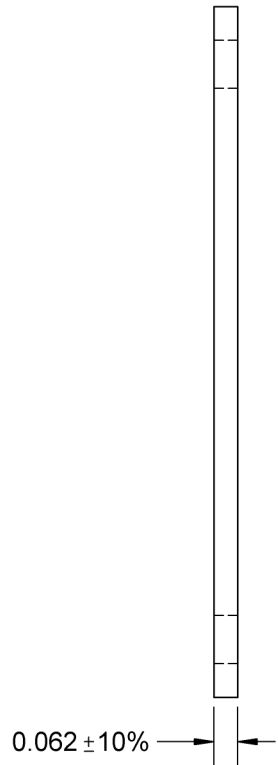
SCREW  
4-40 X 0.156" L  
2-POS

**TopLine<sup>®</sup>**

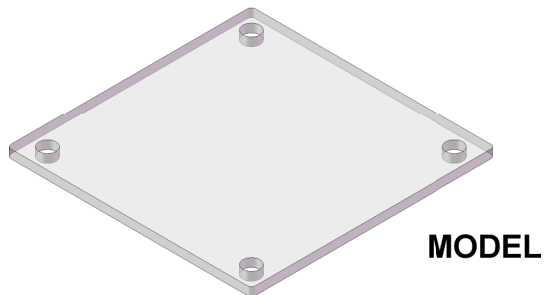
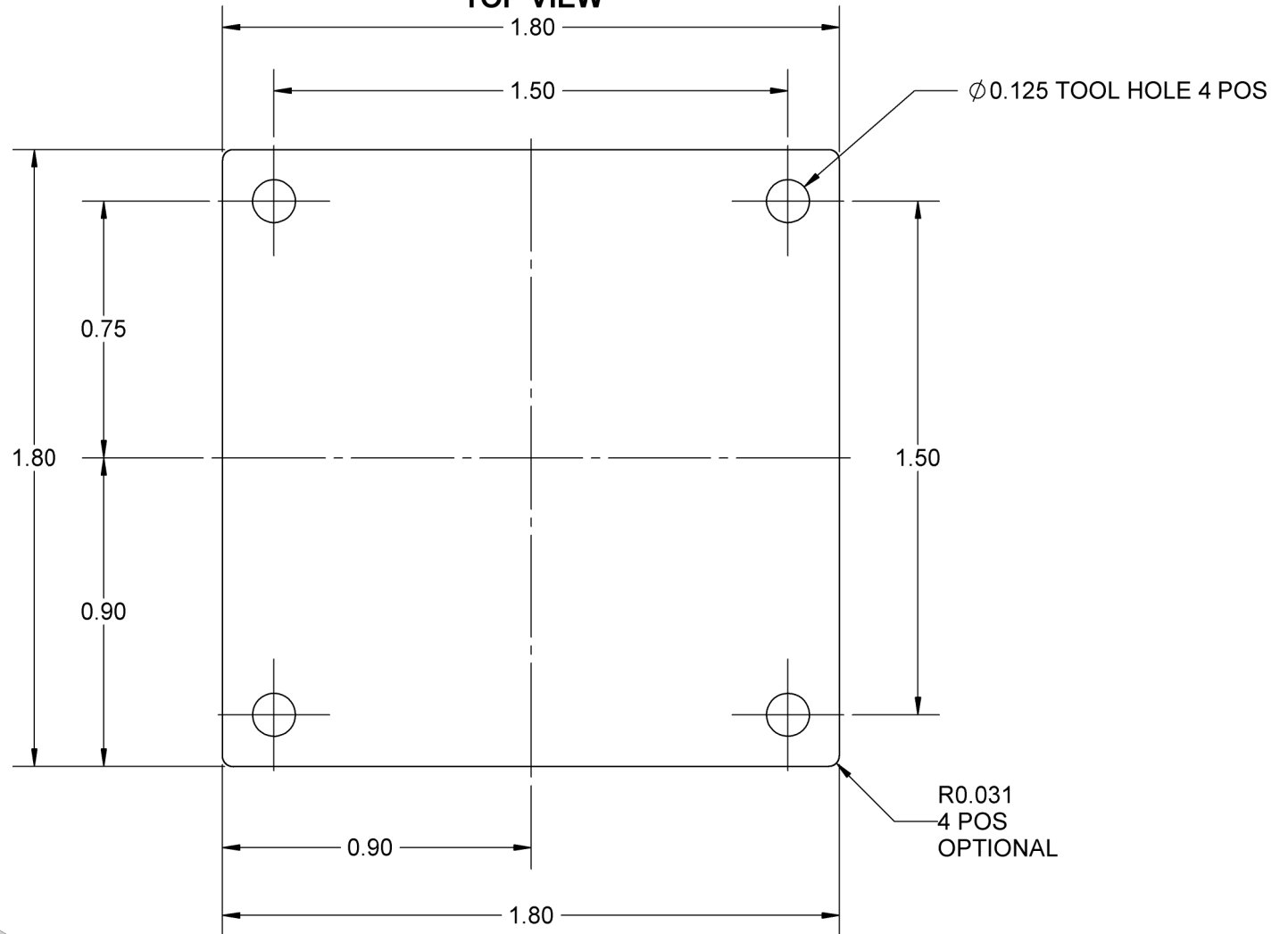
TITLE			
FP624A FLIP PACK			
SCALE	SIZE	DRAWING NO.	REV
2:1	A	002250	B
DO NOT SCALE DRAWING			SHEET 5 OF 12

# RETENTION BOTTOM PLATE DWG 001050

**SIDE VIEW**



**TOP VIEW**



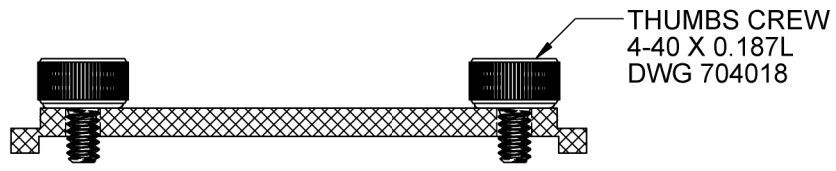
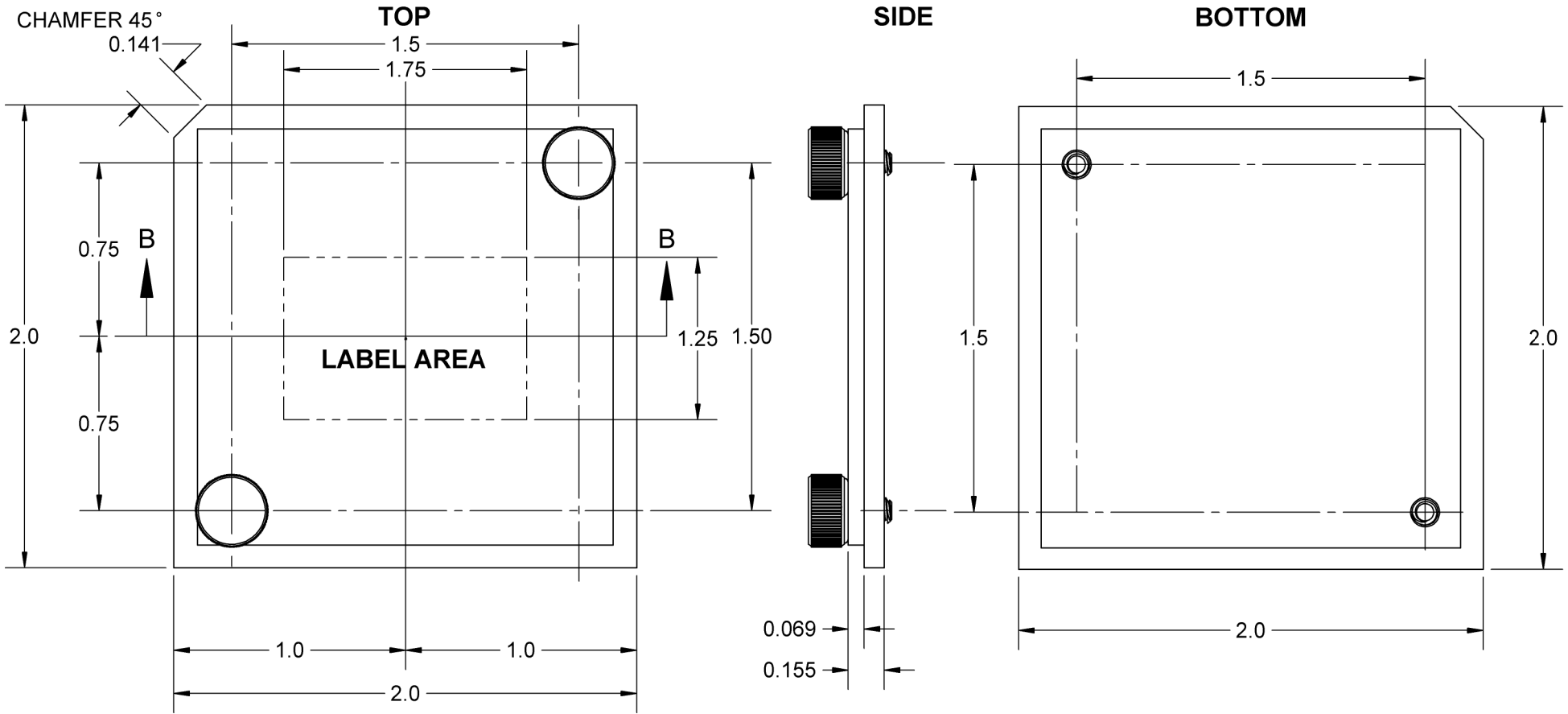
**NOTES:**

1. DIMENSIONS INCHES UNLESS OTHERWISE STATED.
2. MATERIAL CLEAR PC-300 POLYCARBONATE (ESD SAFE).
3. STATIC DISIPATIVE  $10^6 \sim 10^8 \Omega$ .

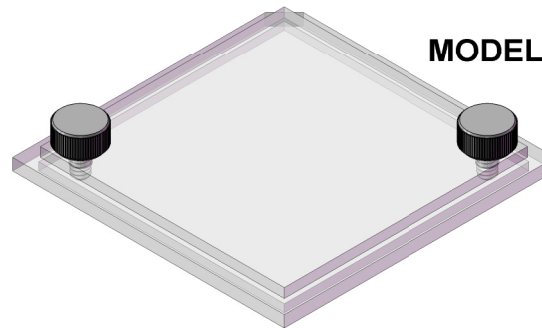
**TopLine®**

TITLE		RETENTION PLATE	
SCALE	SIZE	DRAWING NO.	REV
2:1	A	001050	A
DO NOT SCALE DRAWING			SHEET 6 OF 12

# COVER 001040 REV B



**SECTION B-B**

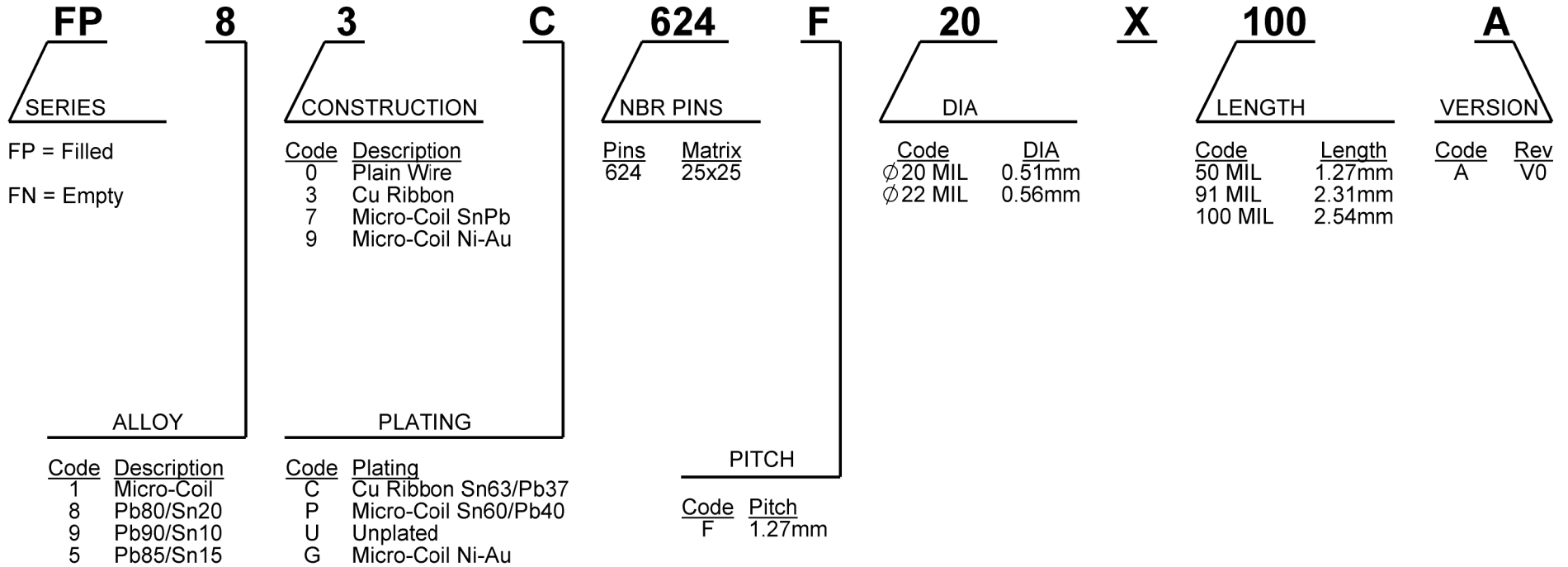


Notes: (Unless Otherwise Specified).

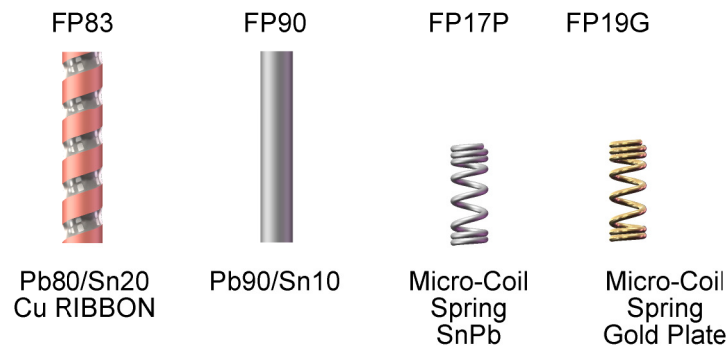
- 1) DIMENSIONS: INCH.
- 2) MATERIAL: TRANSPARENT PMMA PLASTIC.
- 3) ANTISTATIC:  $10^{12}\Omega$  SURFACE RESISTANCE.

<b>TopLine®</b>			
TITLE		FP624A FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
3:2	A	002250	B
DO NOT SCALE DRAWING			SHEET 7 OF 12

# FLIP-PACK<sup>®</sup> PART NUMBERING SYSTEM



## EXAMPLES OF COLUMNS

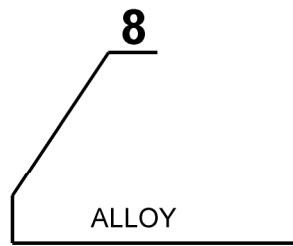


NOTE 1: PP83, PP90 and PP93 REQUIRES TRIMMING TO FINISHED LENGTH.  
NOTE 2: COLUMN 2.54mm TO BE TRIMMED TO 2.21mm AFTER ATTACHMENT.

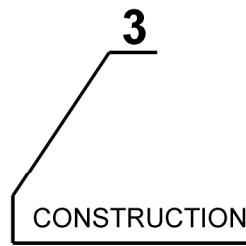
<b>TopLine<sup>®</sup></b>			
TITLE		FP624A FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
10:1	A	002250	B
DO NOT SCALE DRAWING			SHEET 8 OF 12



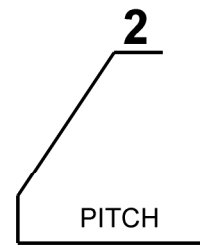
# FLIP-PACK<sup>®</sup> DRAWING NUMBERING SYSTEM



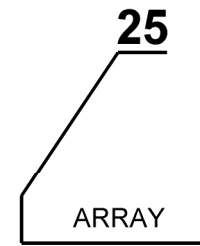
Code	Description
00	Empty
1	Micro-Coil
8	Pb80/Sn20
9	Pb90/Sn10
5	Pn85/Sn15



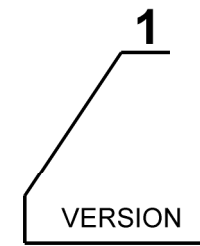
Code	Description
0	Plain Wire
3	Cu Ribbon
7	Micro-Coil SnPb
9	Micro-Coil Ni-Au



Code	Pitch
2	1.27mm



Code	Matrix
25	25x25



Code	Column
0	20x91 (0.51 x 2.31mm)
1	20x100 (0.51 x 2.54mm)
2	22x100 (0.56 x 2.54mm)

## EXAMPLES OF COLUMNS

FP83



Pb80/Sn20  
Cu RIBBON

FP90



Pb90/Sn10

FP17P



Micro-Coil  
Spring  
SnPb

FP19G

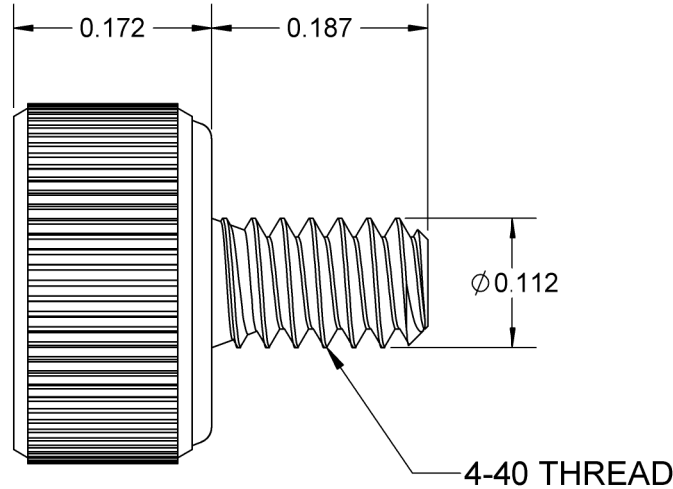
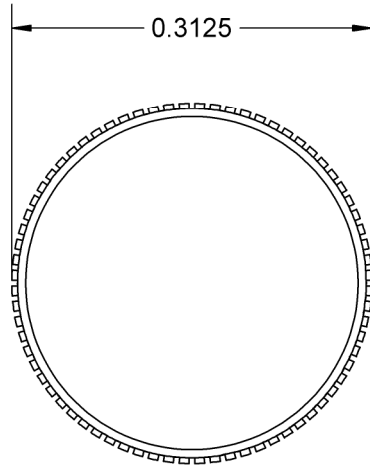


Micro-Coil  
Spring  
Gold Plate

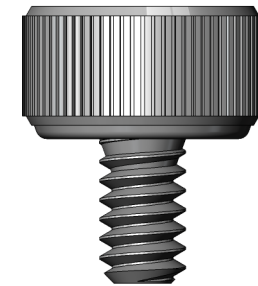
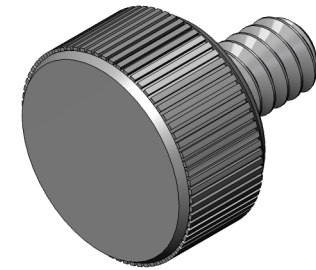
**TopLine<sup>®</sup>**

TITLE			
FP624A FLIP PACK			
SCALE	SIZE	DRAWING NO.	REV
10:1	A	002250	B
DO NOT SCALE DRAWING			SHEET 9 OF 12

# 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.

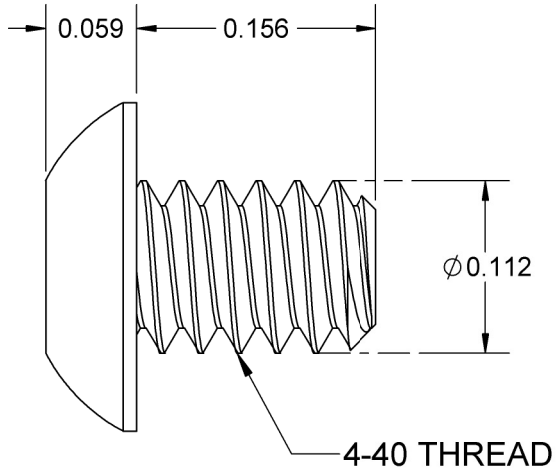
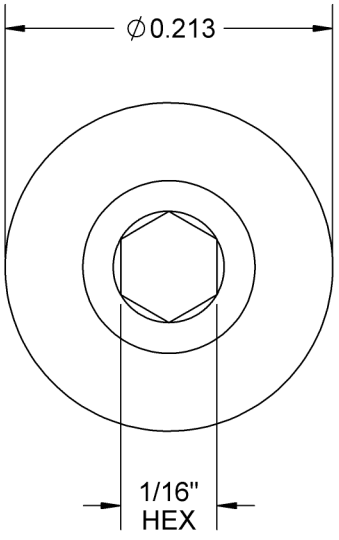
**DRILL TABLE**

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

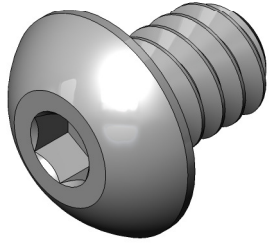
**TopLine®**

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

# HARDWARE CAP SCREW



## MODELS

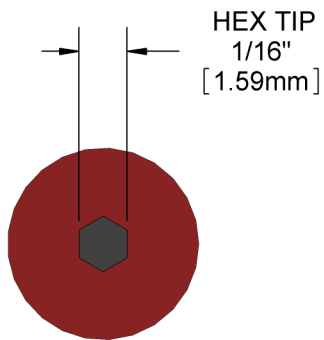
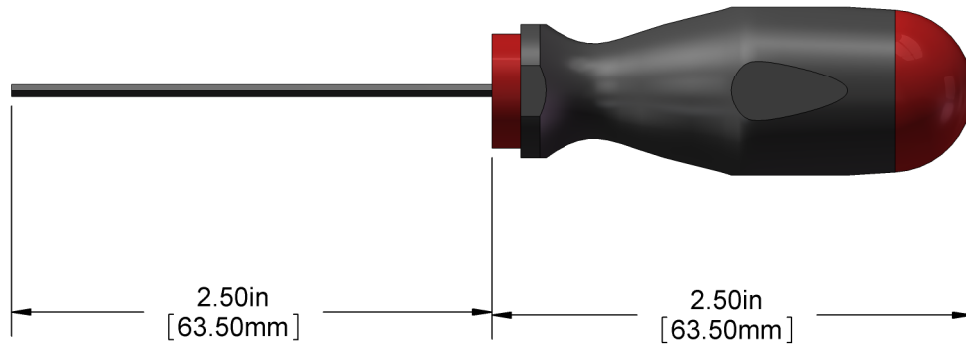
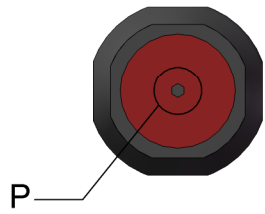


- NOTES: (UNLESS OTHERWISE SPECIFIED)  
 1. DIMENSIONS INCHES.  
 2. MATERIAL: SEE TABLE.  
 3. COLOR: SEE TABLE.

DRILL TABLE						
MATERIAL	COLOR	THREAD	CL HOLE DIA	TAP HOLE DIA	L	DWG
STAINLESS	STAINLESS	4-40	0.125	0.089	0.156	704034

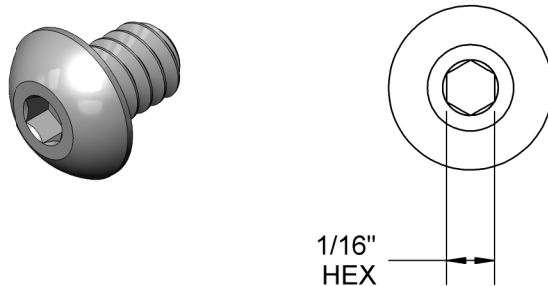
<b>TopLine®</b>			
TITLE <b>BUTTON HEAD SCREW</b> 4-40 THREAD			
SCALE 8:1	SIZE A	DRAWING NO. 704034	REV A
DO NOT SCALE DRAWING			SHEET 11 OF 12

SCREW DRIVER  
HEX 1-16



DETAIL P  
SCALE 4 : 1

EXAMPLE SCREW  
HEX 1/16"  
SCALE = 4:1



NOTES: (UNLESS OTHERWISE SPECIFIED).  
1) DIMENSIONS: INCH [MM].

APPROVALS	DATE	<b>TopLine</b> <sup>®</sup>			
DRAWN	6/12/016				
ENG M. Hart	6/12/016	TITLE SCREW DRIVER 1/16" HEX			
MFG		SCALE 1:1	SIZE A	DRAWING NO.	REV
QA				704000	A
CUST		DO NOT SCALE DRAWING		SHEET 12 OF 12	
REVISED					