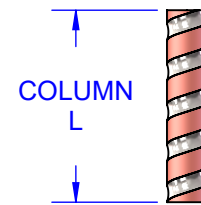
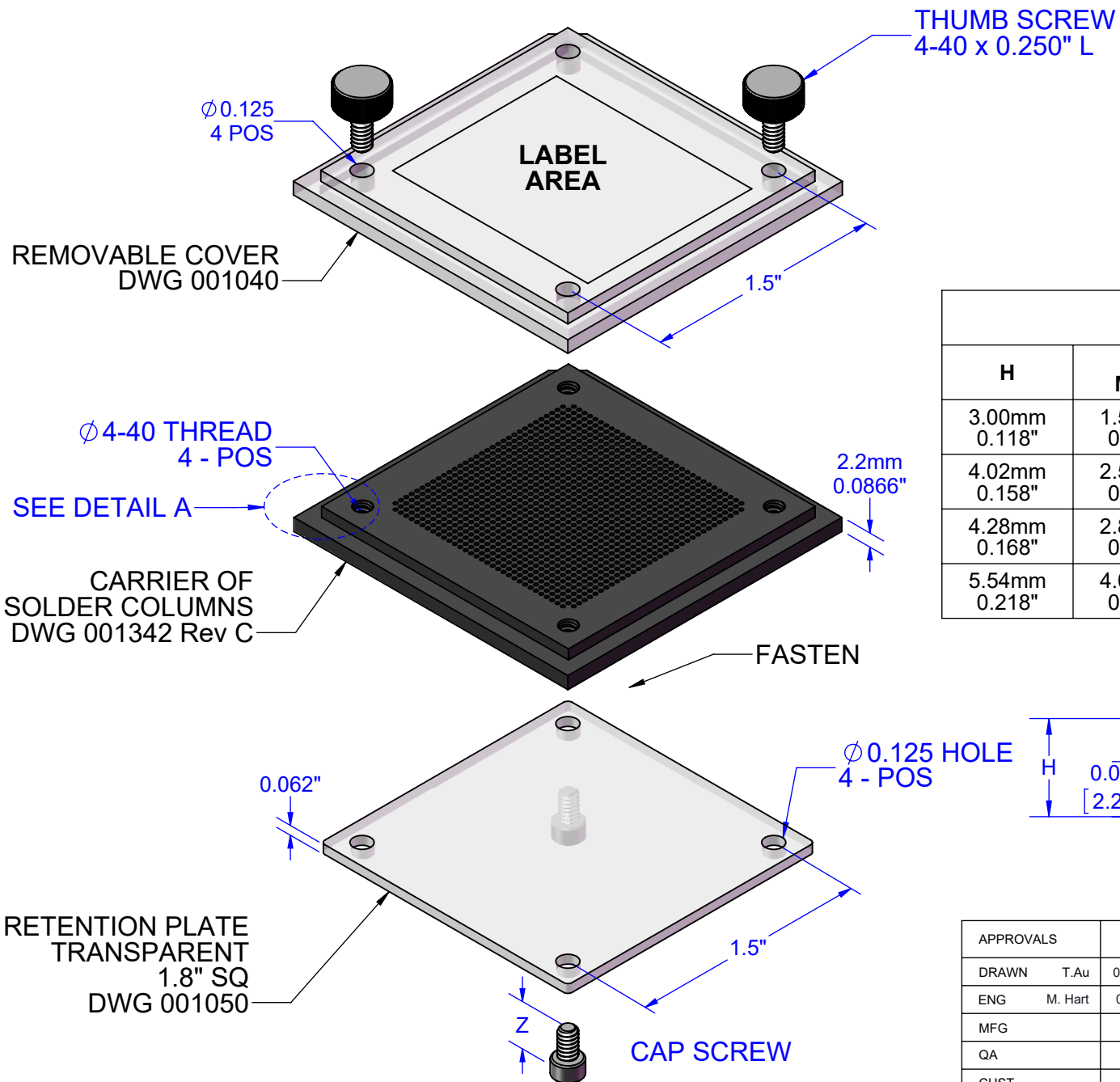
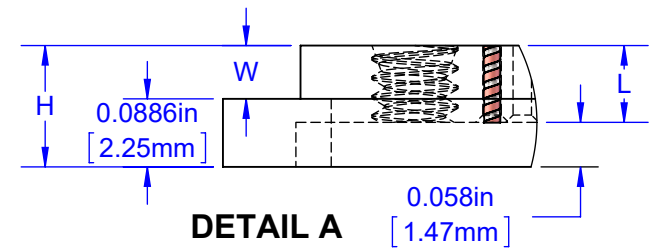


# ASSEMBLY EXPLODED VIEW FLIP-PACK SYSTEM



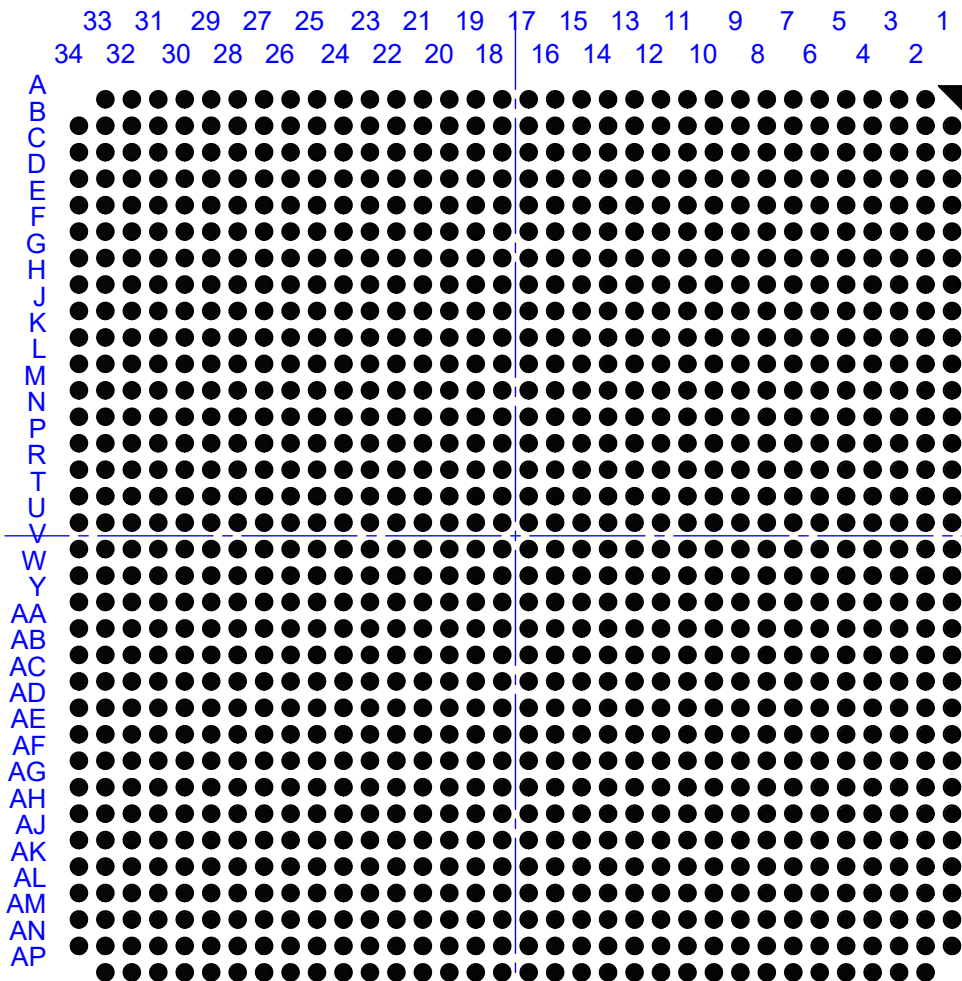
DIMENSION TABLE				
H	L MAX	Z	W	DWG
3.00mm 0.118"	1.52mm 0.060"	3.10mm 0.122"	0.8mm 0.032"	120152
4.02mm 0.158"	2.54mm 0.100"	3.96mm 0.156"	1.82mm 0.072"	120254
4.28mm 0.168"	2.80mm 0.110"	3.96mm 0.156"	2.08mm 0.082"	120280
5.54mm 0.218"	4.06mm 0.160"	4.75mm 0.187"	3.34mm 0.132"	120406



APPROVALS	DATE				
DRAWN T. Au	07/07/16				
ENG M. Hart	07/07/16	TITLE FP1152 FLIP PACK			
MFG		SCALE 1.25:1		SIZE A	DRAWING NO. 001342
QA				REV C	
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 11
REVISED					

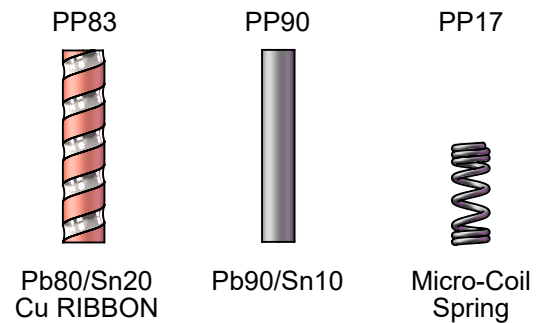
### PART NUMBER TABLE

FLIP-PACK™	Pins	Pitch	Matrix	COLUMN				Empty DWG	Filled DWG
				Alloy	Construction	∅ Dia	Length		
FP83C1152E20x91A	1152	1.0mm	34x34	Pb80	Cu Ribbon	0.51mm	2.31mm	001342 REV B	831342
FP90U1152E20x91A				Pb90	Plain		2.31mm		901342
FP17P1152E20x50A				MCS	Micro Coil		1.27mm		171342



**BOTTOM  
COUNTERSINK SIDE**

#### EXAMPLES OF COLUMNS

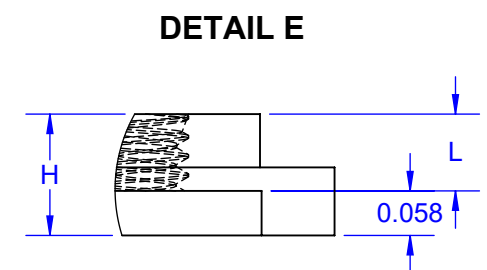
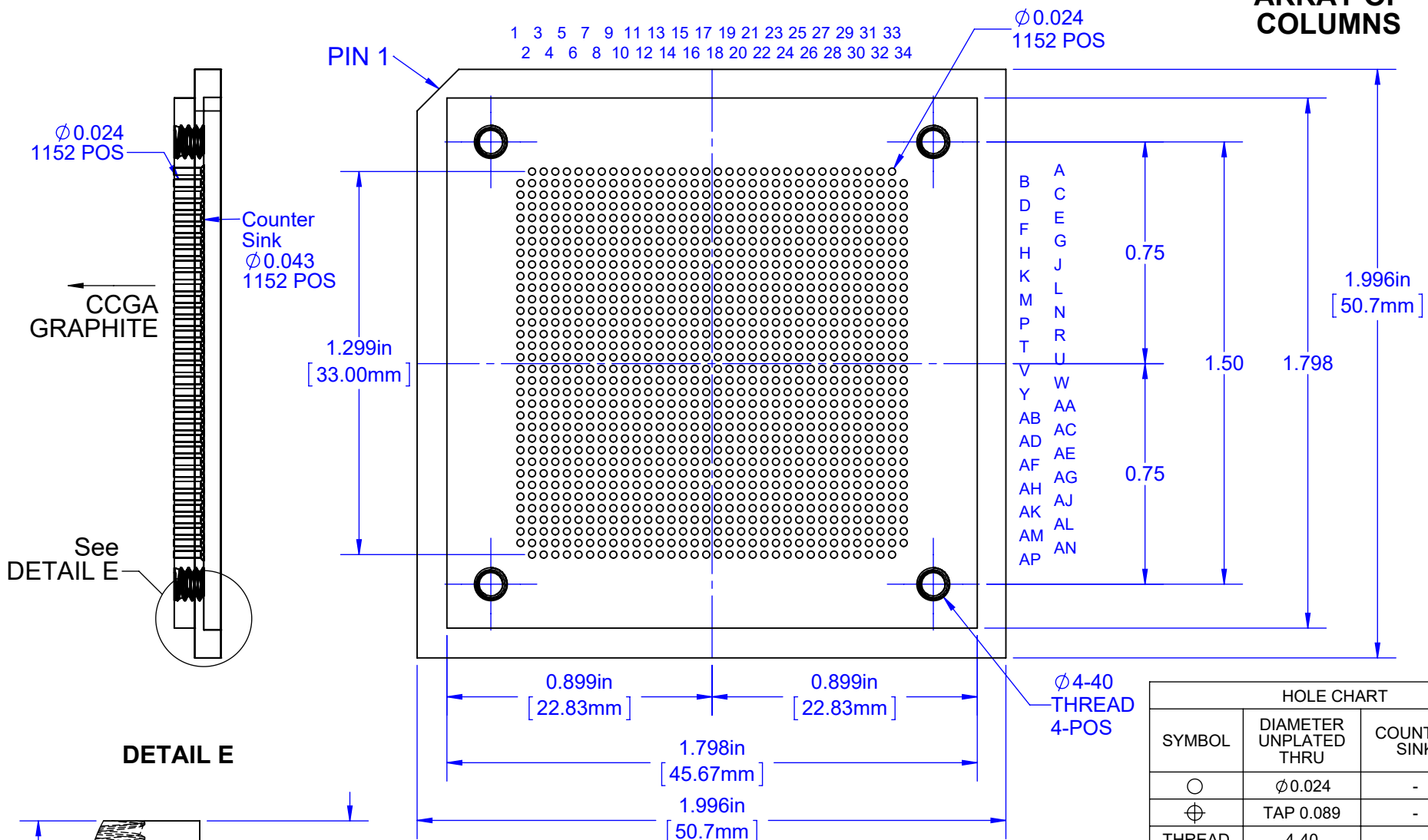


<b>TopLine®</b>			
TITLE FP1152 FLIP PACK			
SCALE NONE	SIZE A	DRAWING NO. 001342	REV C
DO NOT SCALE DRAWING			SHEET 2 OF 11

**SIDE**

**TOP VIEW**

**ARRAY OF COLUMNS**



HOLE CHART			
SYMBOL	DIAMETER UNPLATED THRU	COUNTER SINK	QTY
○	Ø0.024	-	1152
⊕	TAP 0.089	-	4
THREAD	4-40	-	4
◎	-	1152	1152
TOTAL			2312

DIMENSION TABLE		
H	L	DWG
0.118"	0.060"	120152
0.158"	0.100"	120254
0.168"	0.110"	120280
0.218"	0.160"	120406

**TopLine®**

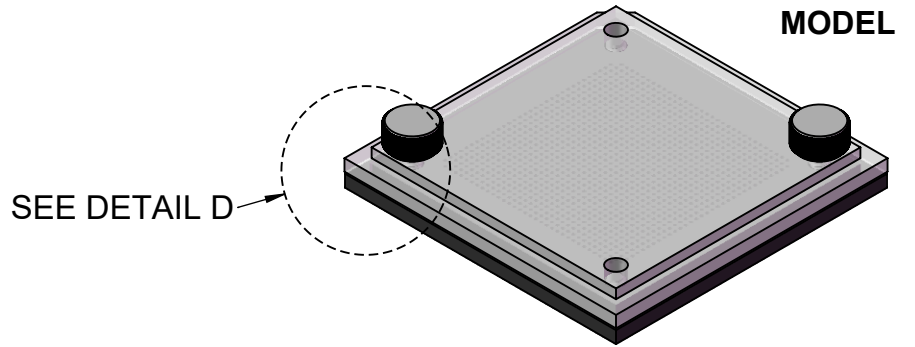
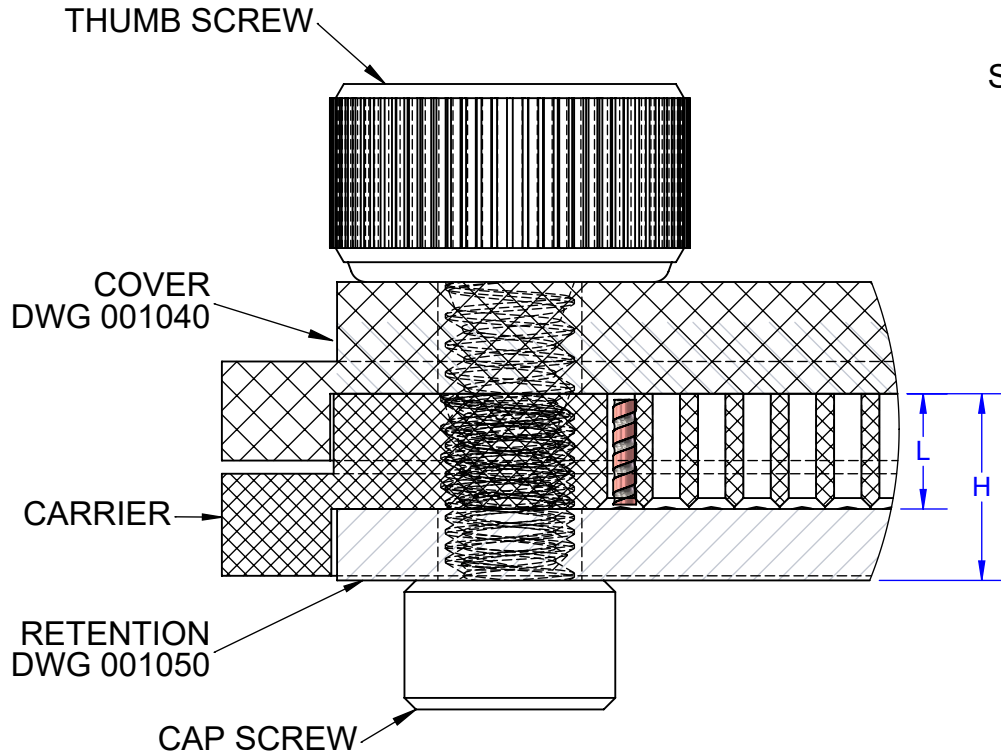
TITLE: FP1152 FLIP PACK

SCALE: 2:1	SIZE: A	DRAWING NO.: 001342	REV: C
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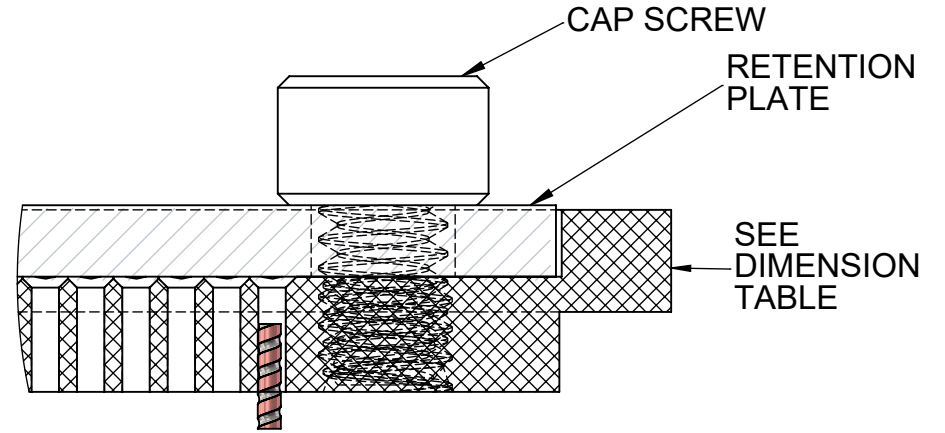
DO NOT SCALE DRAWING      SHEET 3 OF 11

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

### DETAIL D WITH COVER PLATE

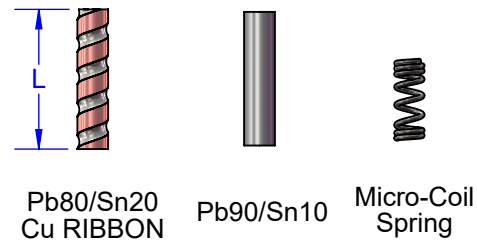


### SHOWN INVERTED WITHOUT COVER PLATE



FALL INTO GRAPHITE

### EXAMPLE OF COLUMNS



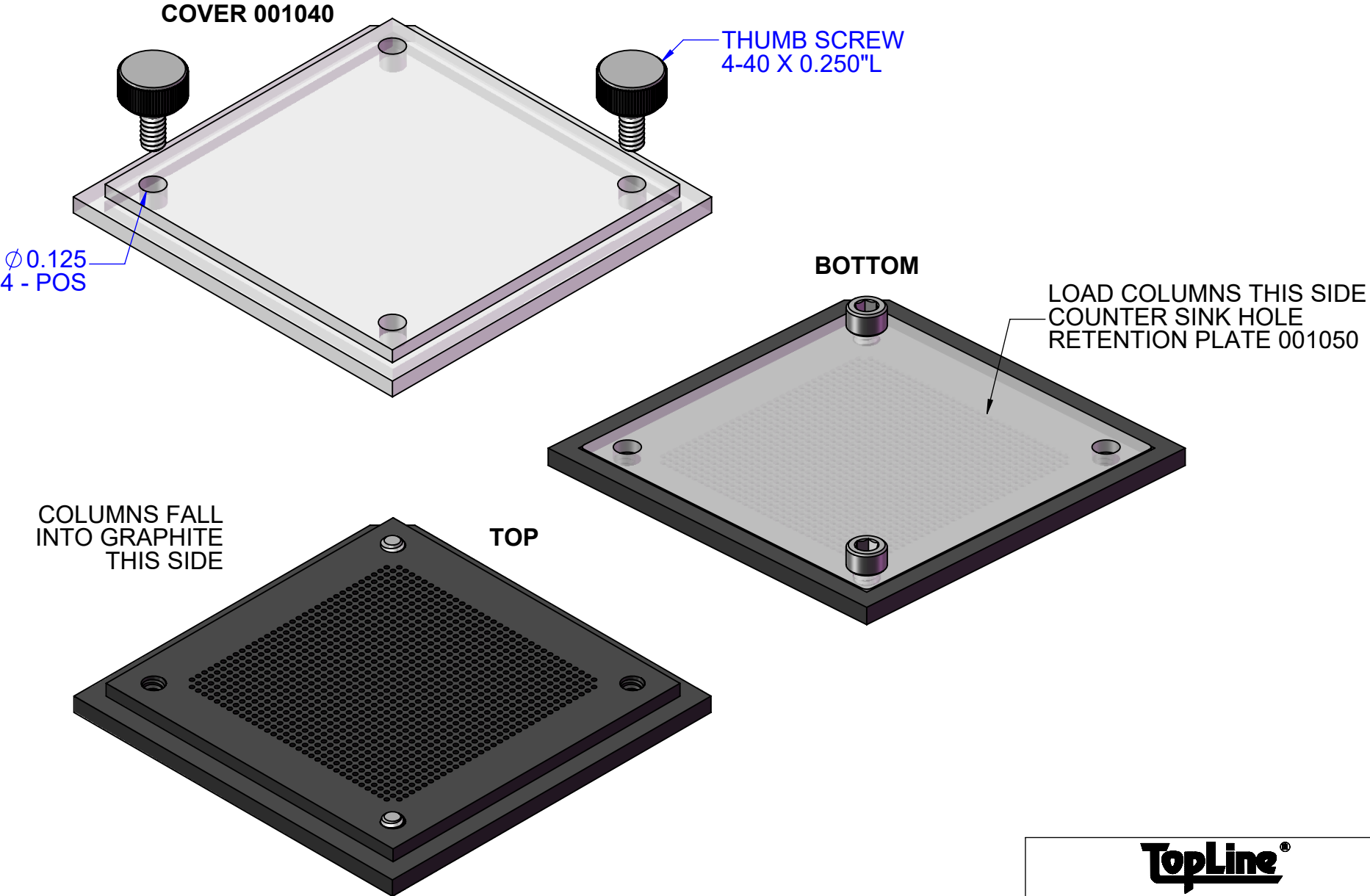
DIMENSION TABLE

H CARRIER HEIGHT	L COLUMN MAX	CAP SCREW TYP	THUMB SCREW TYP	DWG CARRIER
3.00mm 0.118"	1.52mm 0.060"	3.04mm 0.120"	4.75mm 0.187"	120152
4.02mm 0.158"	2.54mm 0.100"	3.96mm 0.156"	4.75mm 0.187"	120254
4.28mm 0.168"	2.80mm 0.110"	3.96mm 0.156"	4.75mm 0.187"	120280
5.54mm 0.218"	4.06mm 0.160"	4.75mm 0.187"	6.35mm 0.250"	120406

**TopLine®**

TITLE				FP1152 FLIP PACK
SCALE	SIZE	DRAWING NO.	REV	
7:1	A	001342	C	
DO NOT SCALE DRAWING			SHEET 4 OF 11	

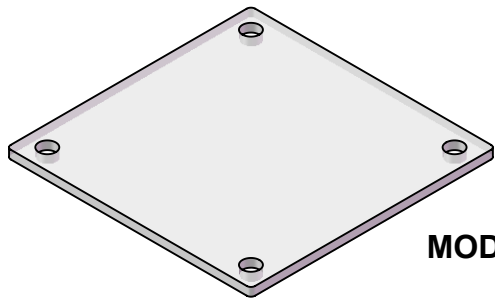
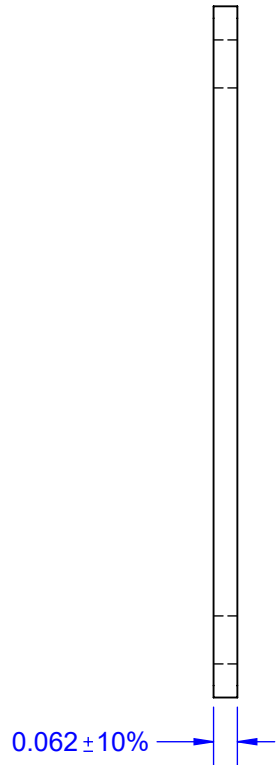
# FLIP PACK MODEL



<b>TopLine®</b>			
TITLE		FP1152 FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
2:1	A	001342	C
DO NOT SCALE DRAWING			SHEET 5 OF 11

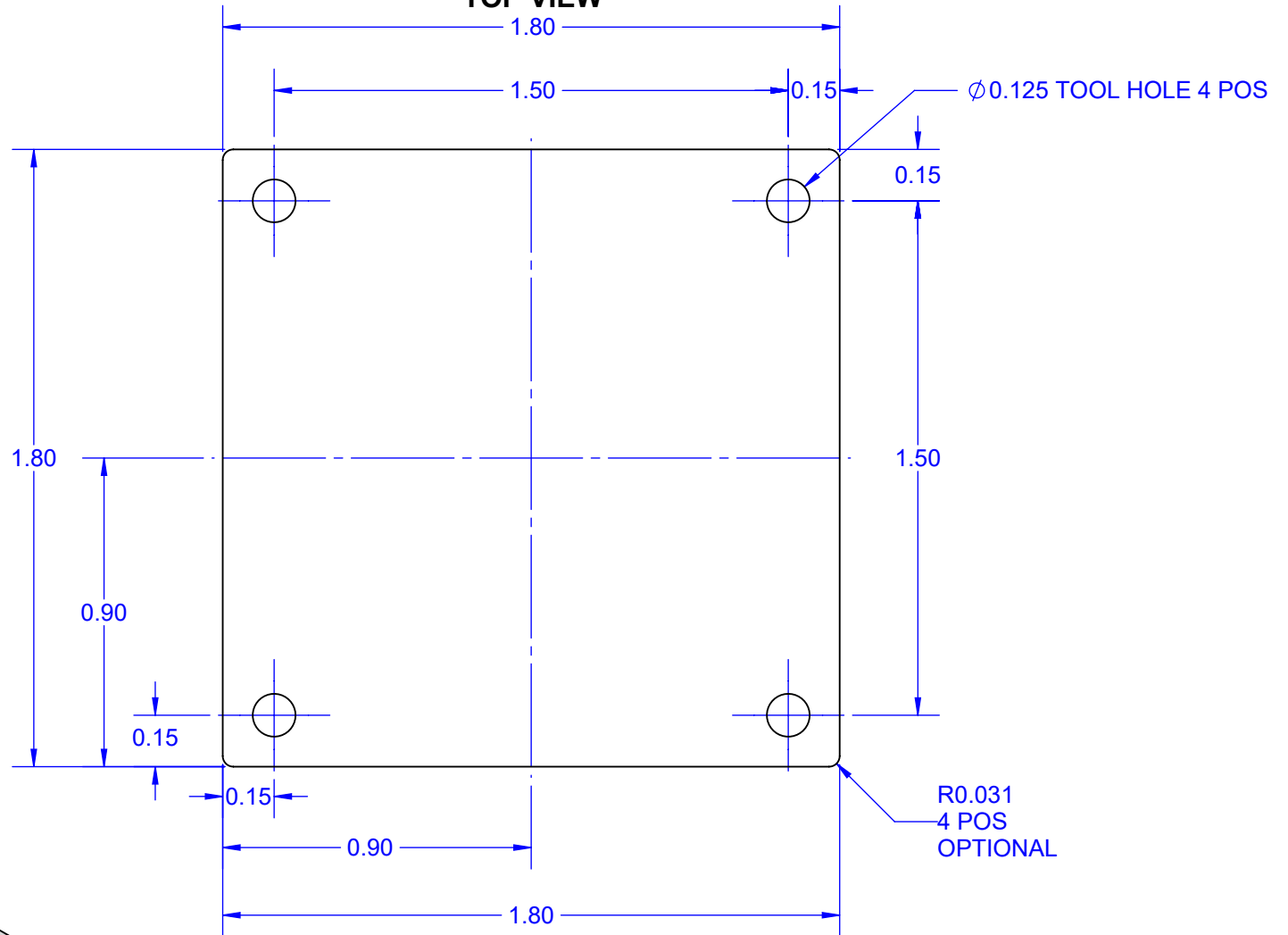
# RETENTION BOTTOM PLATE DWG 001050

**SIDE VIEW**



**MODEL**

**TOP VIEW**



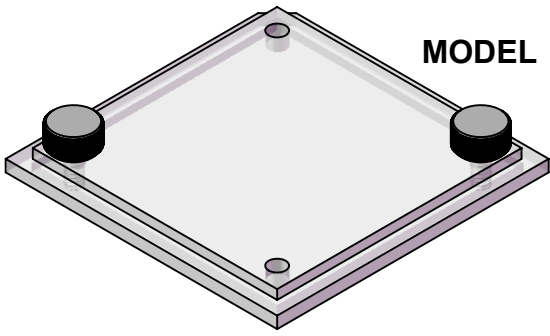
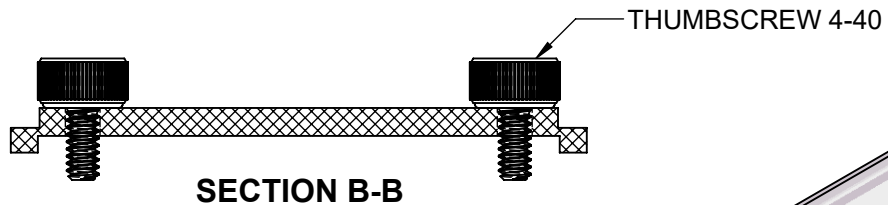
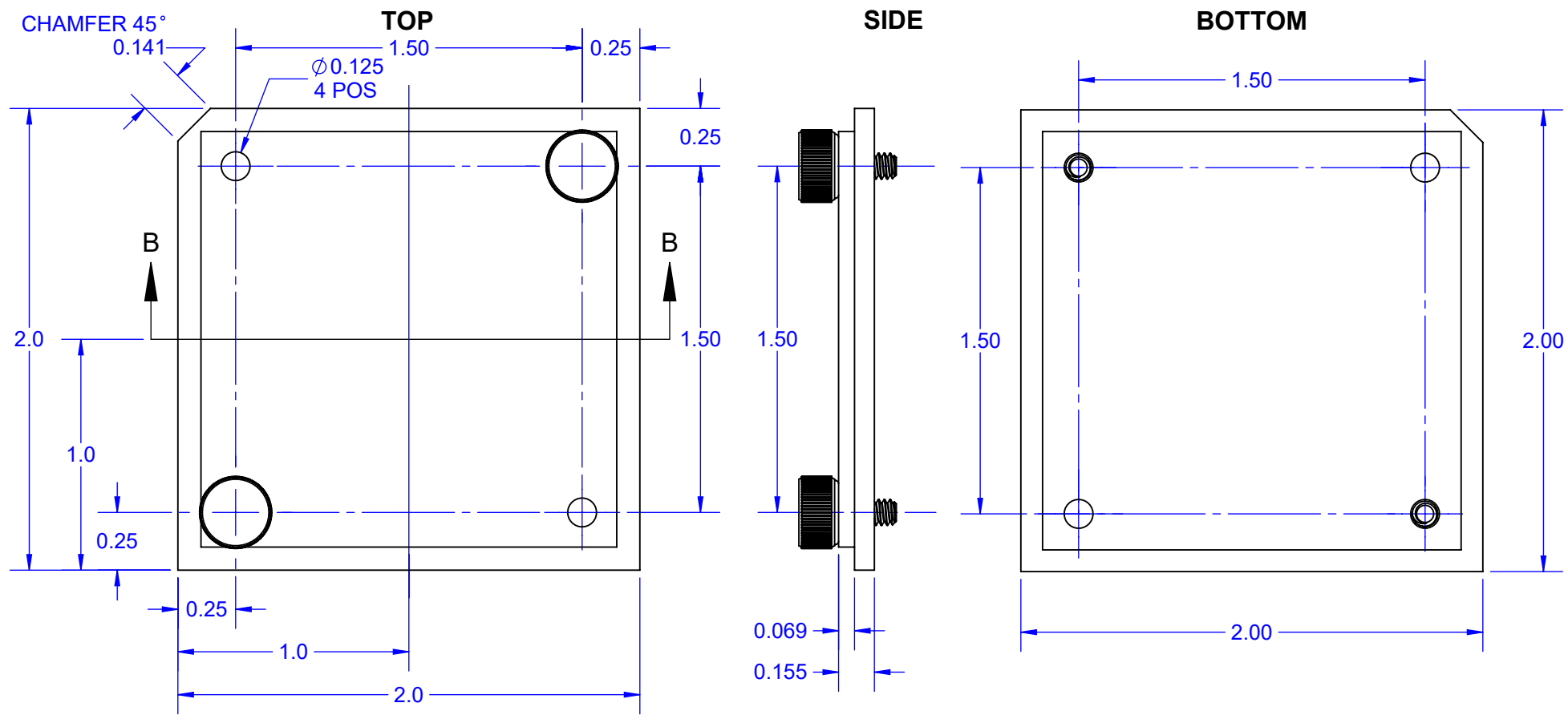
**NOTES:**

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		FP1152 FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
2:1	A	001342	C
DO NOT SCALE DRAWING			SHEET 6 OF 11

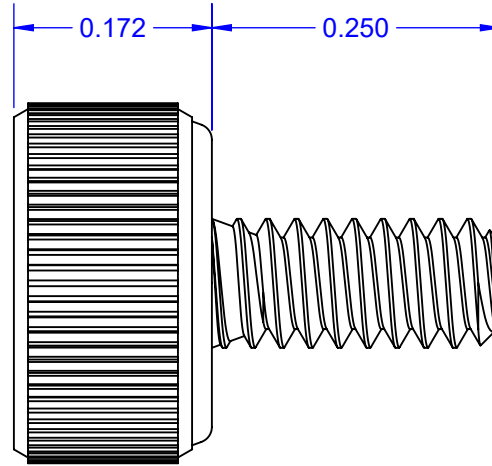
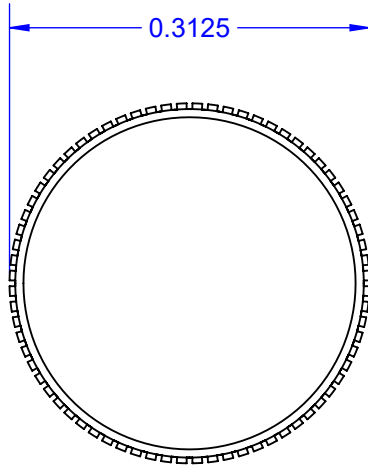
# COVER 001040



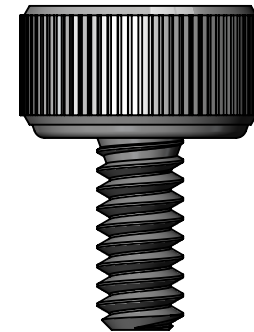
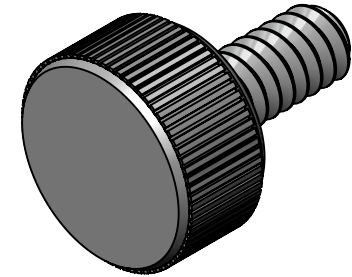
- Notes: (Unless Otherwise Specified).  
 1) DIMENSIONS: INCH.  
 2) MATERIAL: TRANSPARENT PMMA PLASTIC.  
 3) ANTISTATIC:  $10^{12} \Omega$  SURFACE RESISTANCE.

<b>TopLine®</b>			
TITLE		FP1152 FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
3:2	A	001342	C
DO NOT SCALE DRAWING			SHEET 7 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"	0.250	704025

**TopLine®**

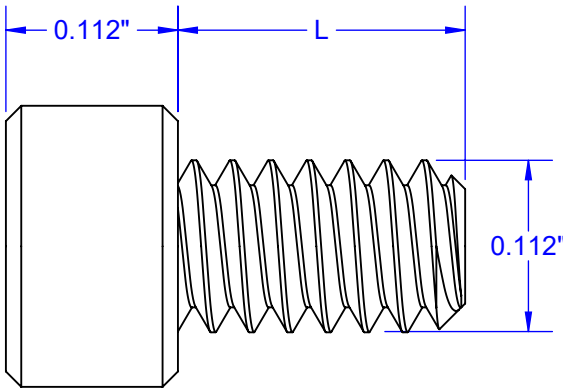
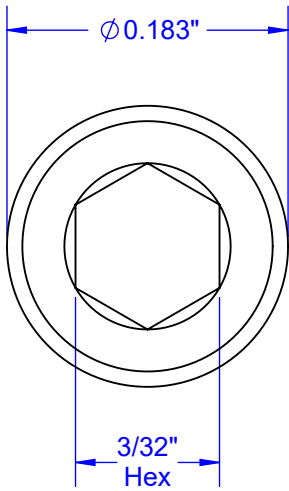
TITLE KNURL THUMB SCREW 4-40 PLASTIC HEAD			
SCALE 6:1	SIZE A	DRAWING NO. 001342	REV C

DO NOT SCALE DRAWING

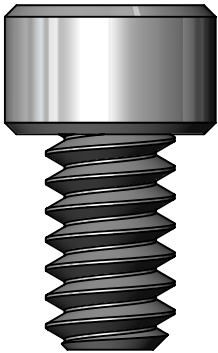
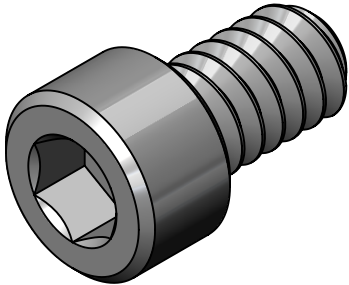
SHEET 8 OF 11



# HARDWARE CAP SCREW



## MODELS

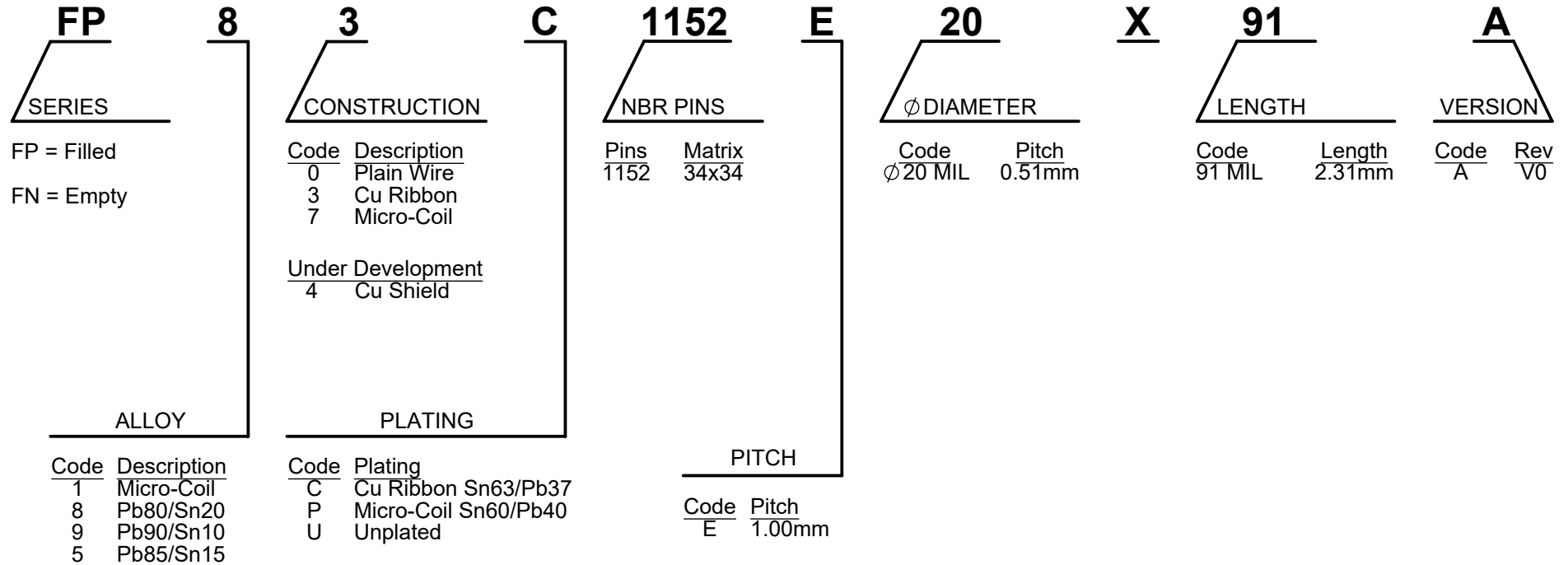


- NOTES:  
 1. DIMENSIONS INCHES (UNLESS OTHERWISE SPECIFIED).  
 2. MATERIAL: SEE TABLE.  
 3. COLOR: SEE TABLE.

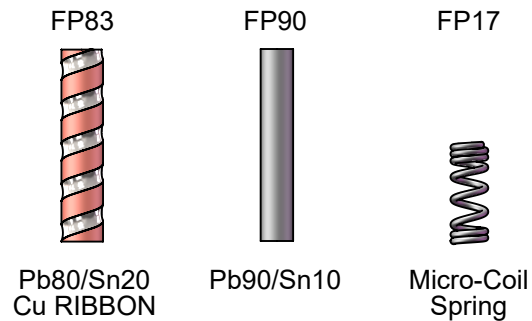
DRILL TABLE						
MATERIAL	COLOR	THREAD	MAX OD	TAP DRILL Start Hole	L	DWG
STAINLESS	BLACK	4-40	0.112"	0.089"	0.125"	704029
STAINLESS	STAINLESS	4-40	0.112"	0.089"	0.156"	704033
STAINLESS	BLACK	4-40	0.112"	0.089"	0.187"	704037

<b>TopLine®</b>			
TITLE      CAP SCREW 4-40			
SCALE 8:1	SIZE A	DRAWING NO. 001342	REV C
DO NOT SCALE DRAWING			SHEET 9 OF 11

# FLIP-PACK™ PART NUMBERING SYSTEM



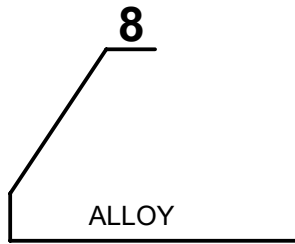
## EXAMPLES OF COLUMNS



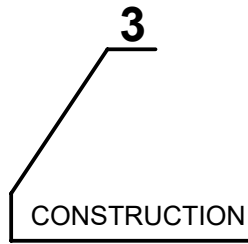
NOTE 1: PP83, PP90 and PP93 REQUIRES TRIMMING TO FINISHED LENGTH.  
NOTE 2: COLUMN 2.54mm TO BE TRIMMED TO 2.21mm AFTER ATTACHMENT.

<b>TopLine®</b>			
TITLE FP1152 FLIP PACK			
SCALE 10:1	SIZE A	DRAWING NO. 001342	REV C
DO NOT SCALE DRAWING			SHEET 10 OF 11

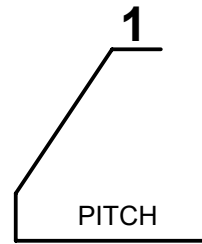
# FLIP-PACK™ DRAWING NUMBERING SYSTEM



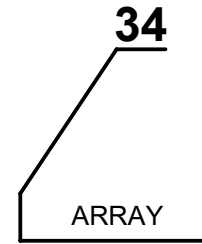
Code	Description
00	Empty
1	Micro-Coil
8	Pb80/Sn20
9	Pb90/Sn10
5	Pn85/Sn15



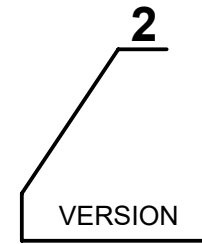
Code	Description
0	Plain Wire
3	Cu Ribbon
7	Micro-Coil



Code	Pitch
1	1.0mm



Code	Matrix
34	34x34



Code	Rev
2	1152 PINS Ø0.51mm

Under Development  
4 Cu + Sn60/Pb40

## EXAMPLES OF COLUMNS

FP83



Pb80/Sn20  
Cu RIBBON

FP90



Pb90/Sn10

FP17



Micro-Coil  
Spring

**TopLine®**

TITLE				FP1152 FLIP PACK			
SCALE	SIZE	DRAWING NO.		REV			
10:1	A	001342		C			
DO NOT SCALE DRAWING						SHEET 11 OF 11	