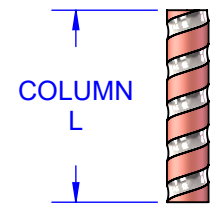
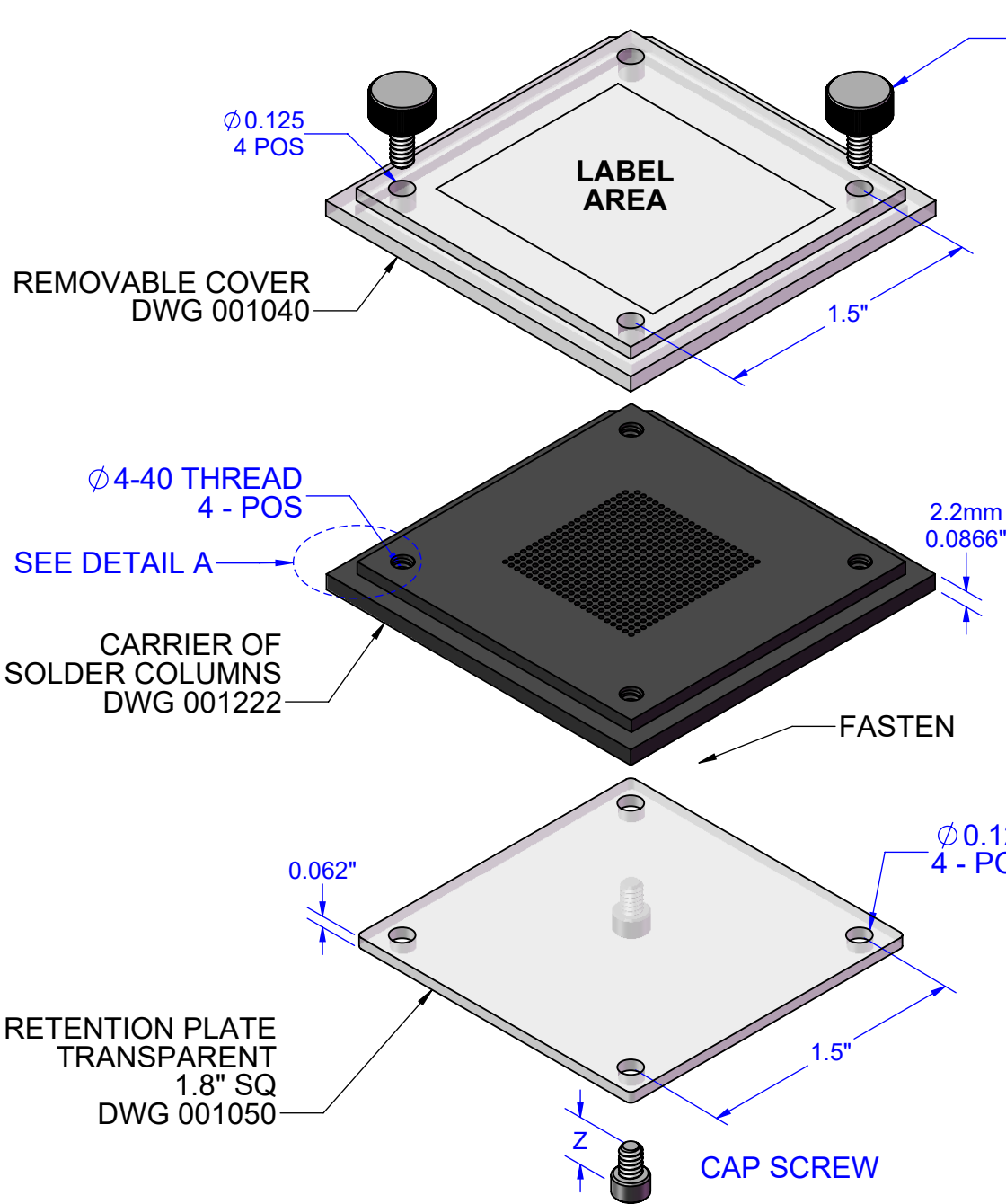
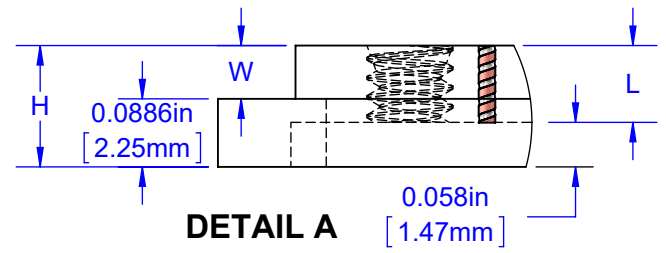


ASSEMBLY EXPLODED VIEW FLIP-PACK SYSTEM



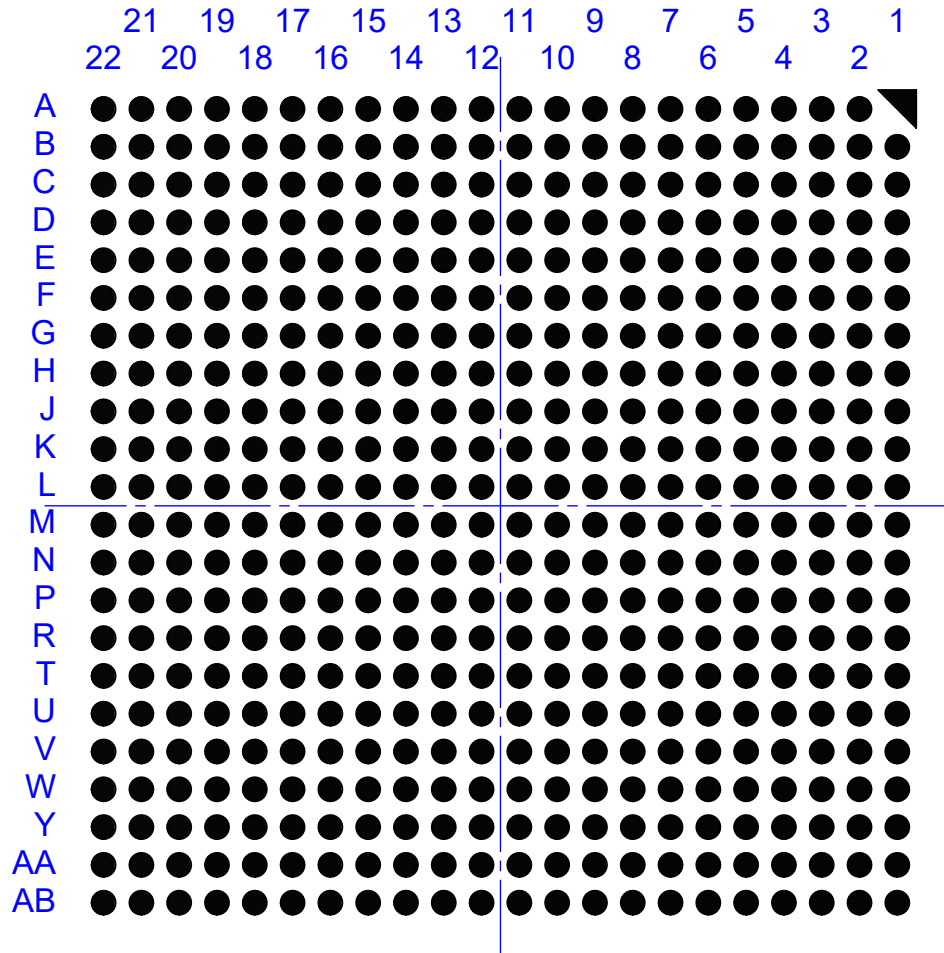
DIMENSION TABLE				
H	L MAX	Z	W	DWG
3.00mm 0.118"	1.52mm 0.060"	3.10mm 0.122"	0.8mm 0.032"	120152
4.02mm 0.158"	2.54mm 0.100"	3.96mm 0.156"	1.82mm 0.072"	120254
4.28mm 0.168"	2.80mm 0.110"	3.96mm 0.156"	2.08mm 0.082"	120280
5.54mm 0.218"	4.06mm 0.160"	4.75mm 0.187"	3.34mm 0.132"	120406



APPROVALS	DATE	TopLine®			
DRAWN T. Au	10/25/16				
ENG M. Hart	10/25/16	TITLE FP483 FLIP PACK			
MFG		SCALE 1.25:1	SIZE A	DRAWING NO. 001222	REV D
QA		DO NOT SCALE DRAWING			SHEET 1 OF 11
CUST					
REVISED					

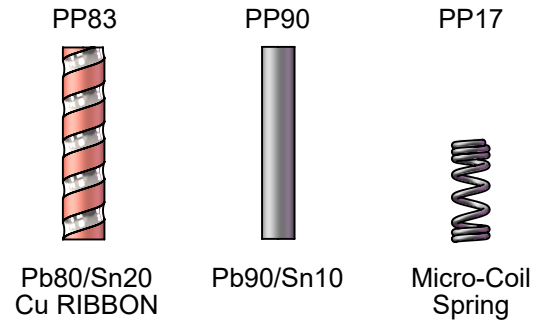
PART NUMBER TABLE

FLIP-PACK™	Pins	Pitch	Matrix	COLUMN				Empty DWG	Filled DWG
				Alloy	Construction	∅ Dia	Length		
FP83C483E20x91A	483	1.0mm	22x22	Pb80	Cu Ribbon	0.51mm	2.31mm	001222 REV D	831222
FP90U483E20x91				Pb90	Plain		2.31mm		901222
FP17P483E20x50A				MCS	Micro Coil		1.27mm		171222



**BOTTOM
COUNTERSINK SIDE**

EXAMPLES OF COLUMNS



TopLine®

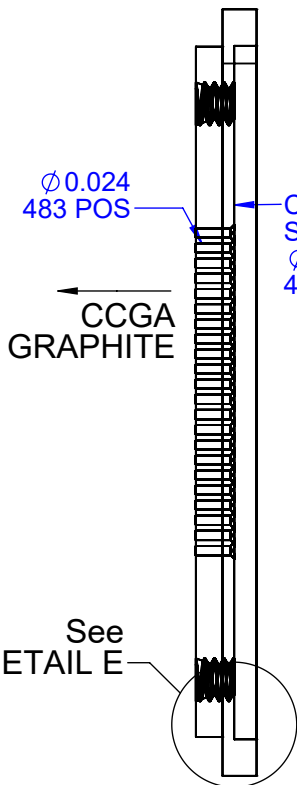
TITLE FP483 FLIP PACK			
SCALE NONE	SIZE A	DRAWING NO. 001222	REV D
DO NOT SCALE DRAWING			SHEET 2 OF 11

SIDE

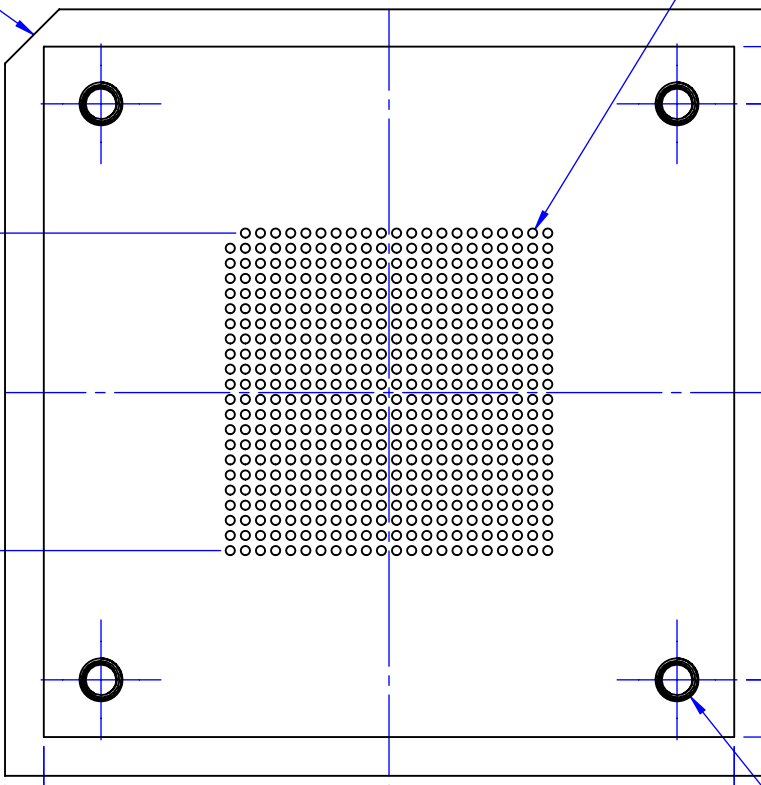
TOP VIEW

ARRAY OF COLUMNS

1 3 5 7 9 11 13 15 17 19 21
2 4 6 8 10 12 14 16 18 20 22



PIN 1
0.8268in
[21mm]



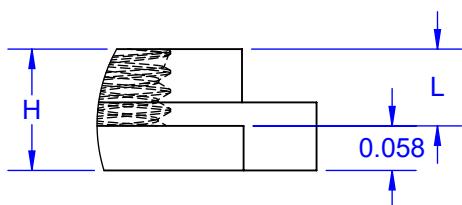
Ø0.0240
483 POS
0.7520
1.5000
1.798
0.7480
Ø4-40
THREAD
4-POS

B
D
F
H
K
M
P
T
V
Y
AB
A
C
E
G
J
L
N
R
U
W
AA

1.996in
[50.7mm]

See
DETAIL E

DETAIL E



0.899in
[22.83mm]
0.899in
[22.83mm]
1.798in
[45.67mm]
1.996in
[50.7mm]

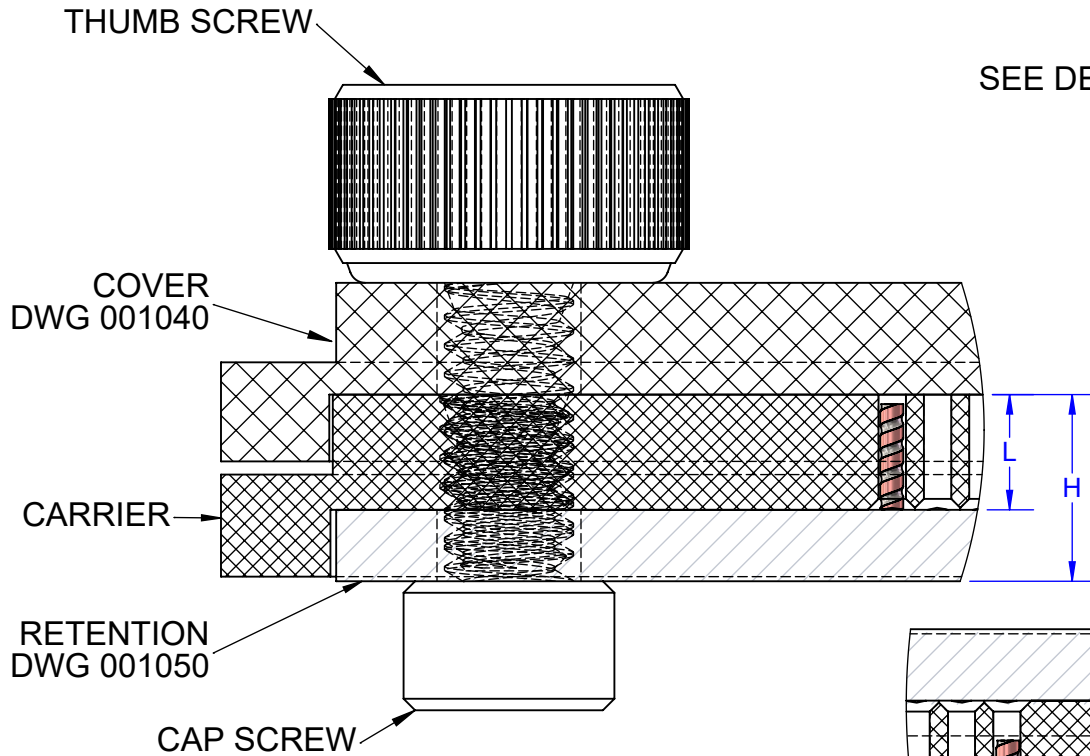
HOLE CHART			
SYMBOL	DIAMETER UNPLATED THRU	COUNTER SINK	QTY
○	Ø0.024	-	483
⊕	TAP 0.089	-	4
THREAD	4-40	-	4
◎	-	483	483
TOTAL			974

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 FP483 FLIP PACK			
SCALE 2:1	SIZE A	DRAWING NO. 001222	REV D
DO NOT SCALE DRAWING			SHEET 3 OF 11

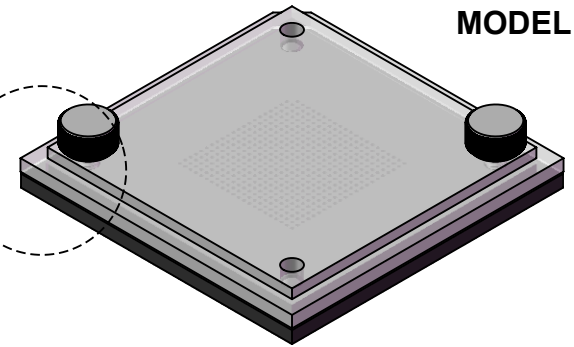
Notes: (Unless Otherwise Specified).
1) MATERIAL: BLACK PLASTIC, CONDUCTIVE.
2) DIMENSIONS : INCHES [MM].

DETAIL D WITH COVER PLATE

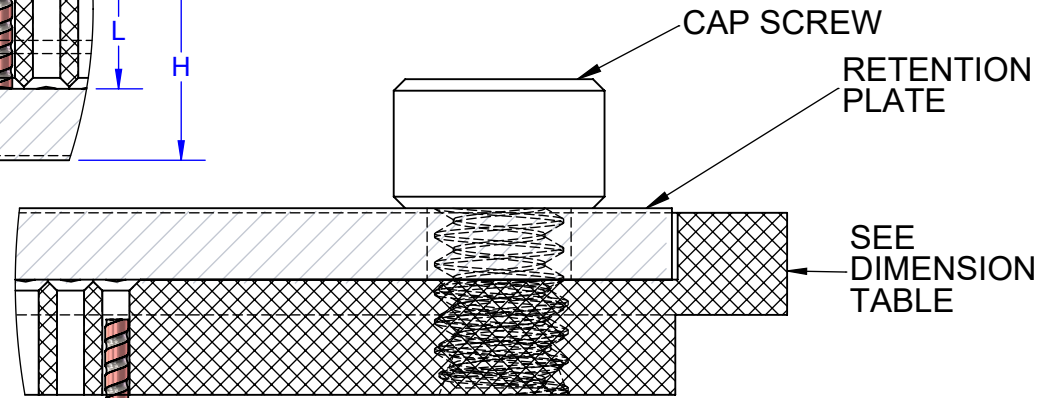


MODEL

SEE DETAIL D

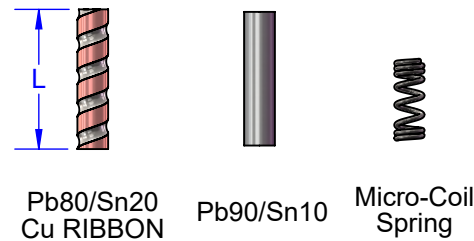


SHOWN INVERTED WITHOUT COVER PLATE



FALL INTO GRAPHITE

EXAMPLE OF COLUMNS



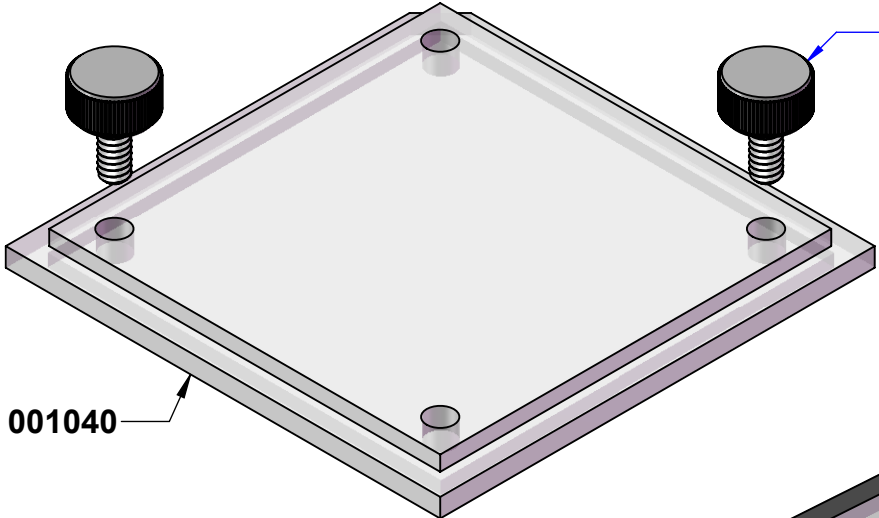
DIMENSION TABLE

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				FP483 FLIP PACK			
SCALE	SIZE	DRAWING NO.	REV				
7:1	A	001222	D				
DO NOT SCALE DRAWING						SHEET 4 OF 11	

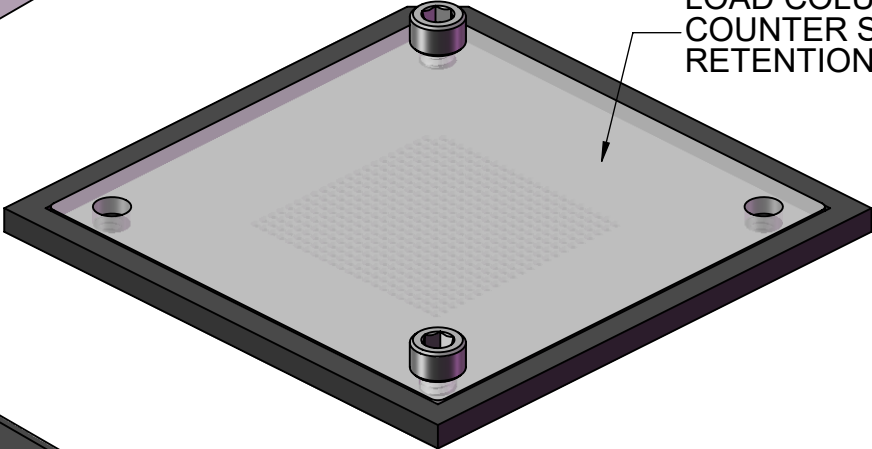
FLIP PACK MODEL



THUMB SCREW
4-40 X 0.250"L

DWG 001040

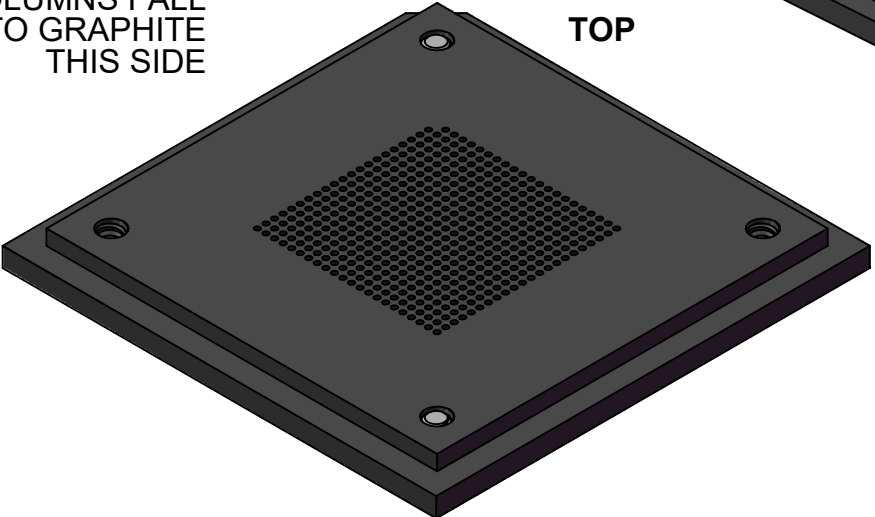
BOTTOM



LOAD COLUMNS THIS SIDE
COUNTER SINK HOLE
RETENTION PLATE 001050

COLUMNS FALL
INTO GRAPHITE
THIS SIDE

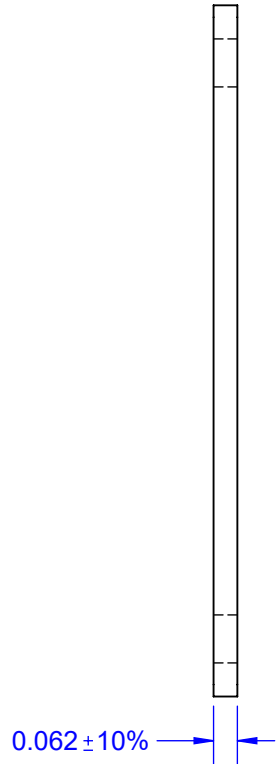
TOP



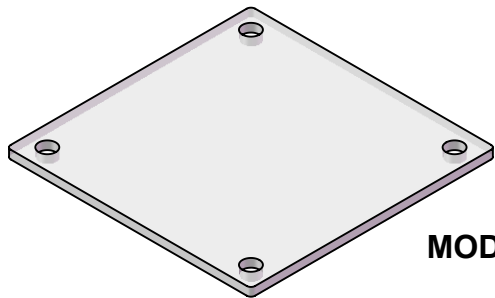
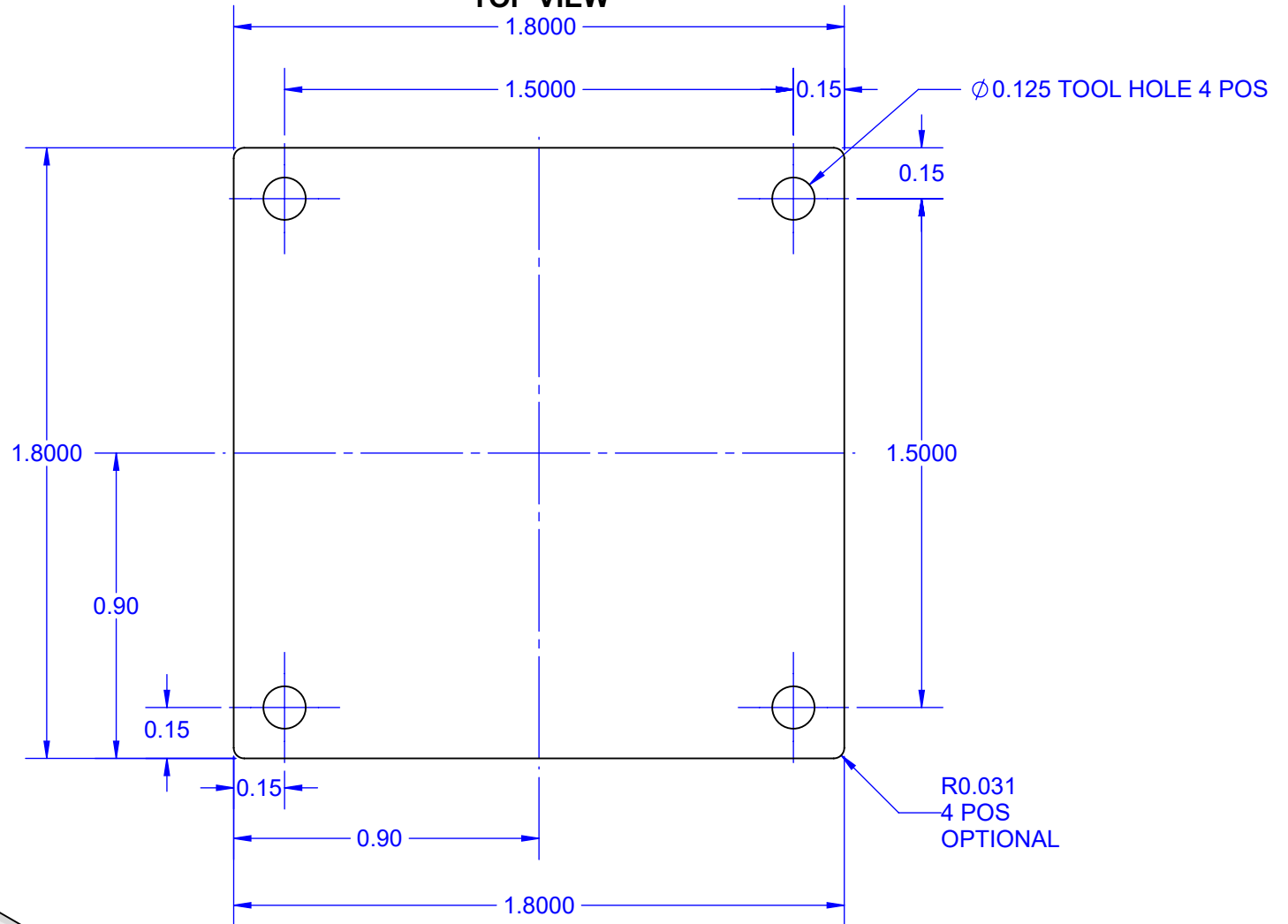
TopLine®			
TITLE		FP483 FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
2:1	A	001222	D
DO NOT SCALE DRAWING			SHEET 5 OF 11

RETENTION BOTTOM PLATE DWG 001050

SIDE VIEW



TOP VIEW



MODEL

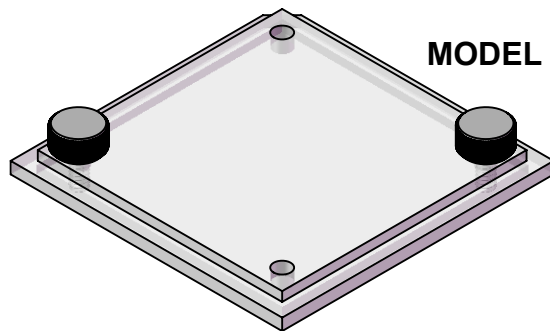
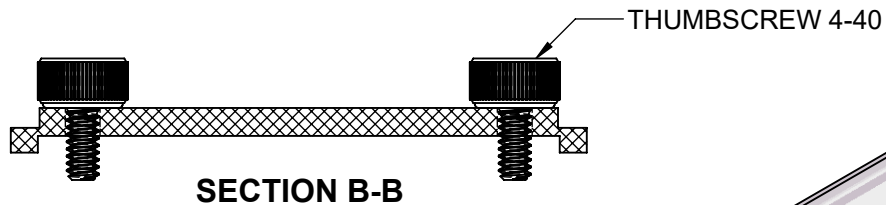
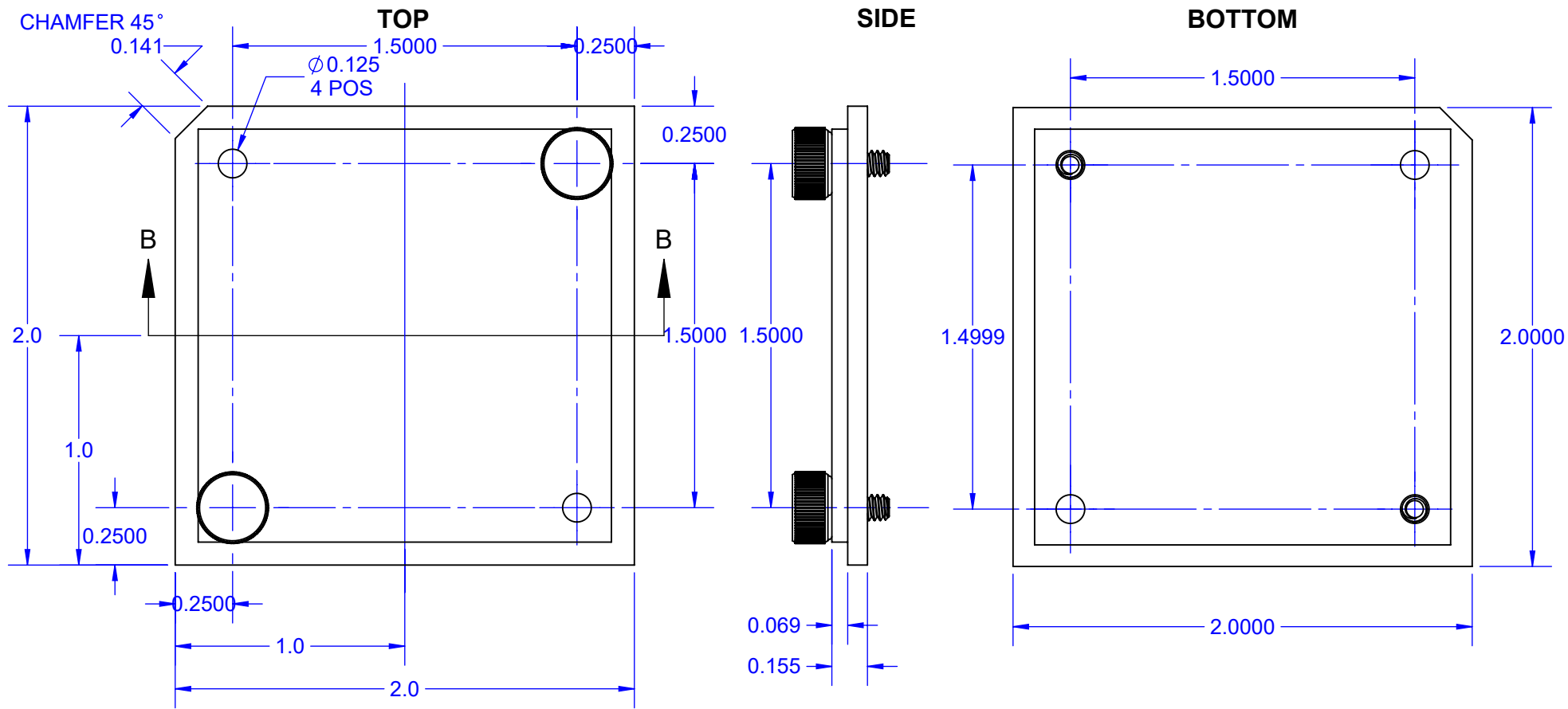
NOTES:

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		FP483 FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
2:1	A	001222	D
DO NOT SCALE DRAWING			SHEET 6 OF 11

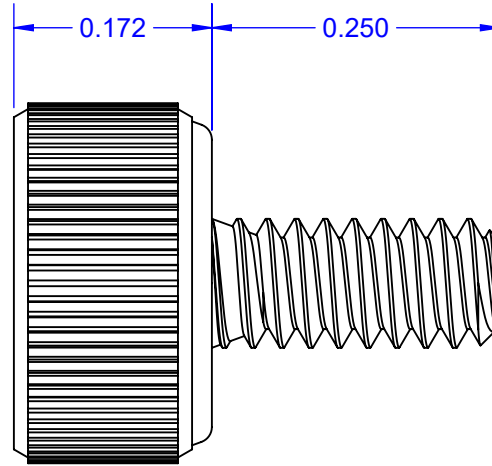
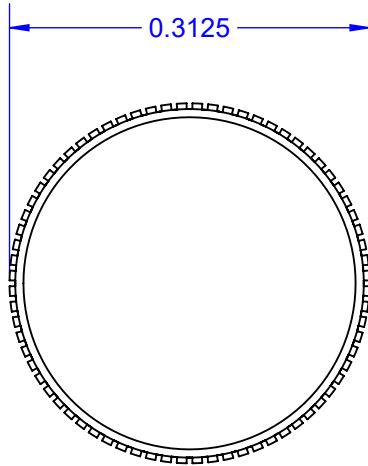
COVER 001040



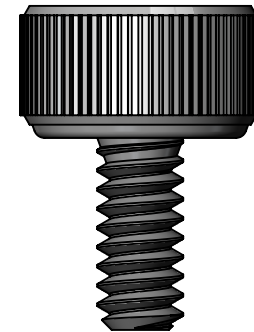
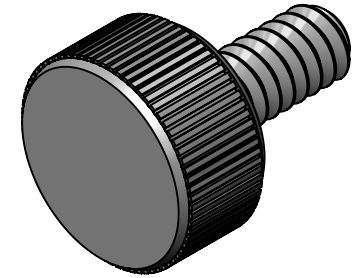
- Notes: (Unless Otherwise Specified).
 1) DIMENSIONS: INCH.
 2) MATERIAL: TRANSPARENT PMMA PLASTIC.
 3) ANTISTATIC: $10^{12} \Omega$ SURFACE RESISTANCE.

TopLine®			
TITLE		FP483 FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
3:2	A	001222	D
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®

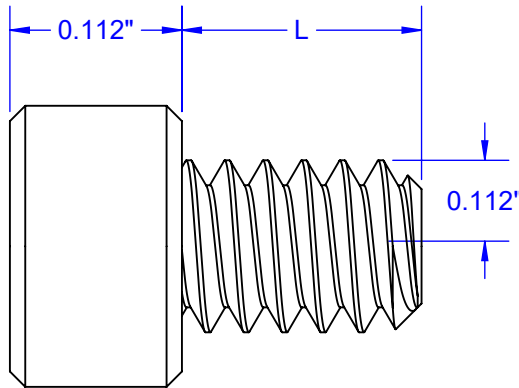
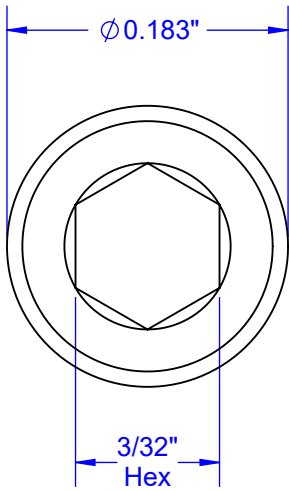
TITLE **KNURL THUMB SCREW
4-40 PLASTIC HEAD**

SCALE 6:1	SIZE A	DRAWING NO. 001222	REV D
--------------	-----------	-----------------------	----------

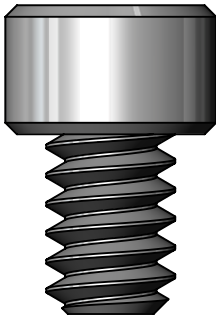
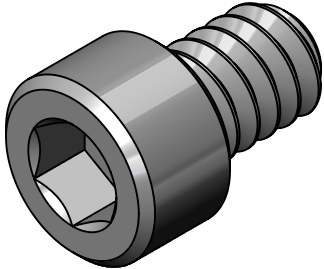
DO NOT SCALE DRAWING

SHEET 8 OF 11

HARDWARE CAP SCREW



MODELS

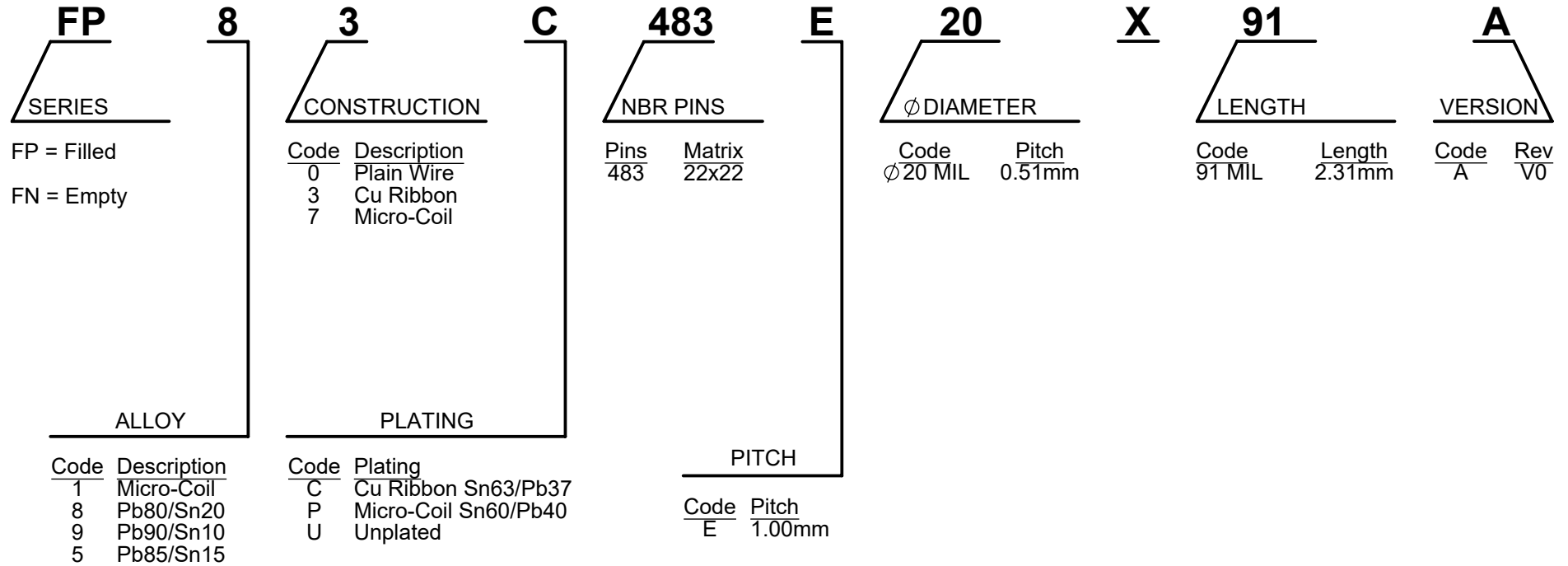


- NOTES:**
1. DIMENSIONS INCHES (UNLESS OTHERWISE SPECIFIED).
 2. MATERIAL: SEE TABLE.
 3. COLOR: SEE TABLE.

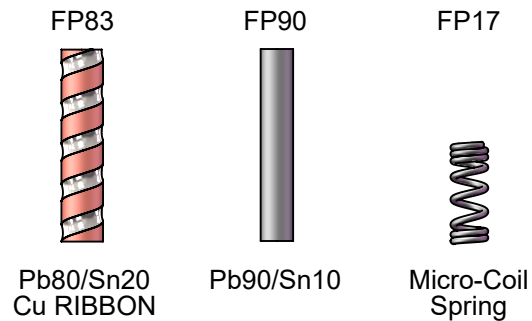
DRILL TABLE						
MATERIAL	COLOR	THREAD	MAX OD	TAP DRILL Start Hole	L	DWG
STAINLESS	BLACK	4-40	0.112"	0.089"	0.125"	704029
STAINLESS	STAINLESS	4-40	0.112"	0.089"	0.156"	704033
STAINLESS	BLACK	4-40	0.112"	0.089"	0.187"	704037

TopLine®			
TITLE CAP SCREW 4-40			
SCALE 8:1	SIZE A	DRAWING NO. 001222	REV D
DO NOT SCALE DRAWING			SHEET 9 OF 11

FLIP-PACK™ PART NUMBERING SYSTEM



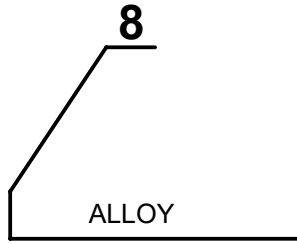
EXAMPLES OF COLUMNS



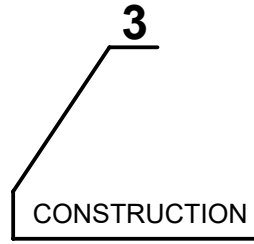
NOTE 1: PP83, PP90 and PP93 REQUIRES TRIMMING TO FINISHED LENGTH.
NOTE 2: COLUMN 2.54mm TO BE TRIMMED TO 2.21mm AFTER ATTACHMENT.

TopLine®			
TITLE		FP483 FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
10:1	A	001222	D
DO NOT SCALE DRAWING			SHEET 10 OF 11

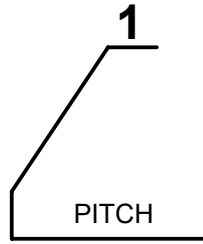
FLIP-PACK™ DRAWING NUMBERING SYSTEM



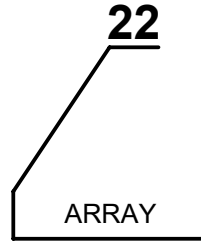
Code	Description
00	Empty
1	Micro-Coil
8	Pb80/Sn20
9	Pb90/Sn10
5	Pn85/Sn15



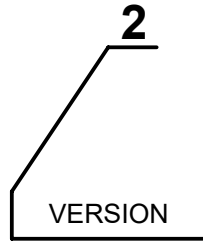
Code	Description
0	Plain Wire
3	Cu Ribbon
7	Micro-Coil



Code	Pitch
1	1.0mm






Code	Matrix
34	34x34



Code	Rev
2	483 PINS Ø0.51mm

Under Development
4 Cu + Sn60/Pb40

EXAMPLES OF COLUMNS

FP83	FP90	FP17
		
Pb80/Sn20 Cu RIBBON	Pb90/Sn10	Micro-Coil Spring

TopLine®			
TITLE		FP483 FLIP PACK	
SCALE	SIZE	DRAWING NO.	REV
10:1	A	001222	D
DO NOT SCALE DRAWING			SHEET 11 OF 11