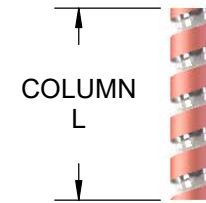
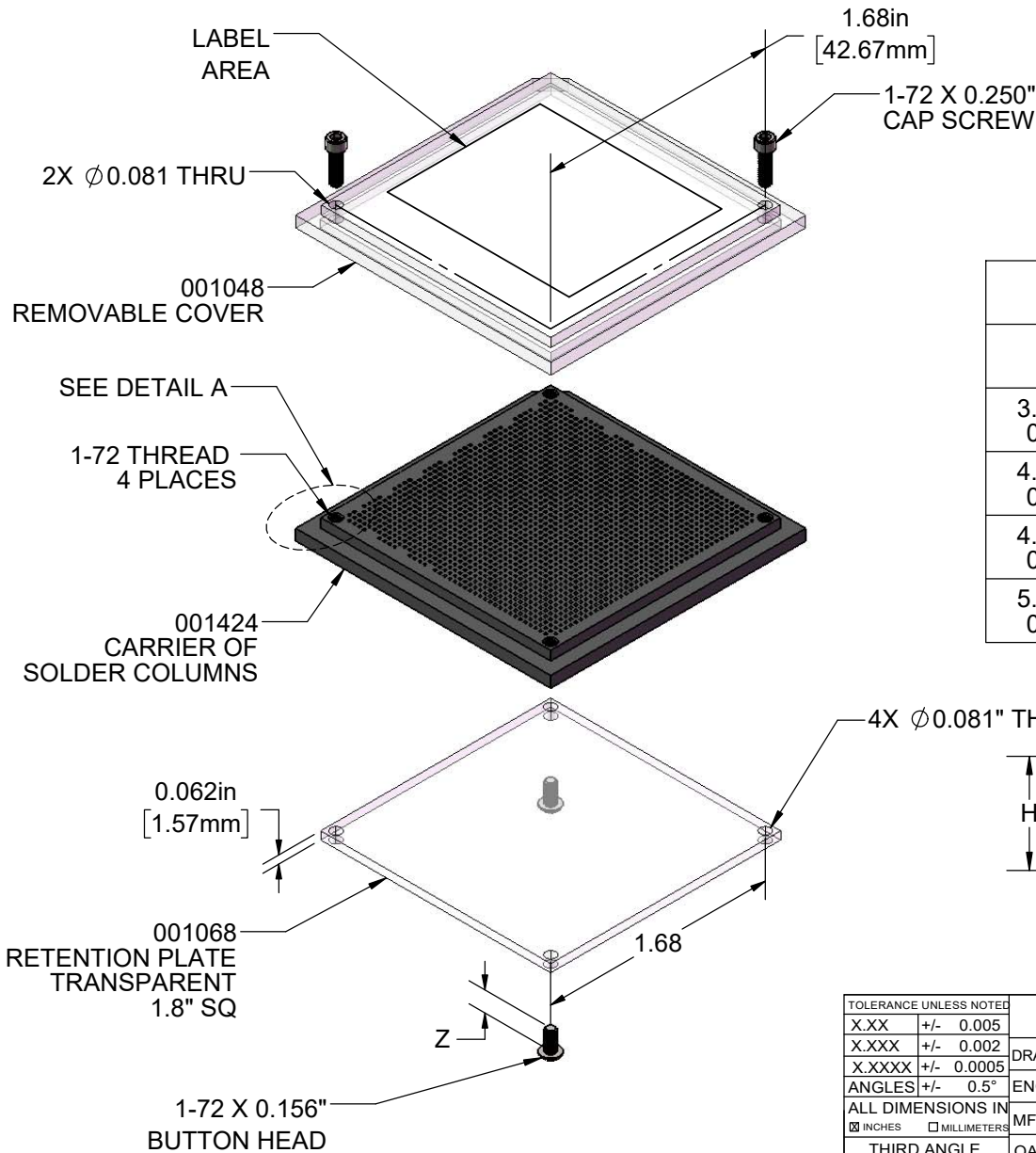
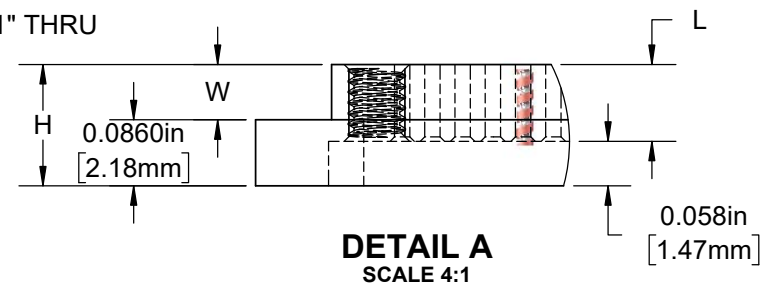


ASSEMBLY EXPLODED VIEW FLIP-PACK SYSTEM



SOLDER COLUMN
SCALE 10:1

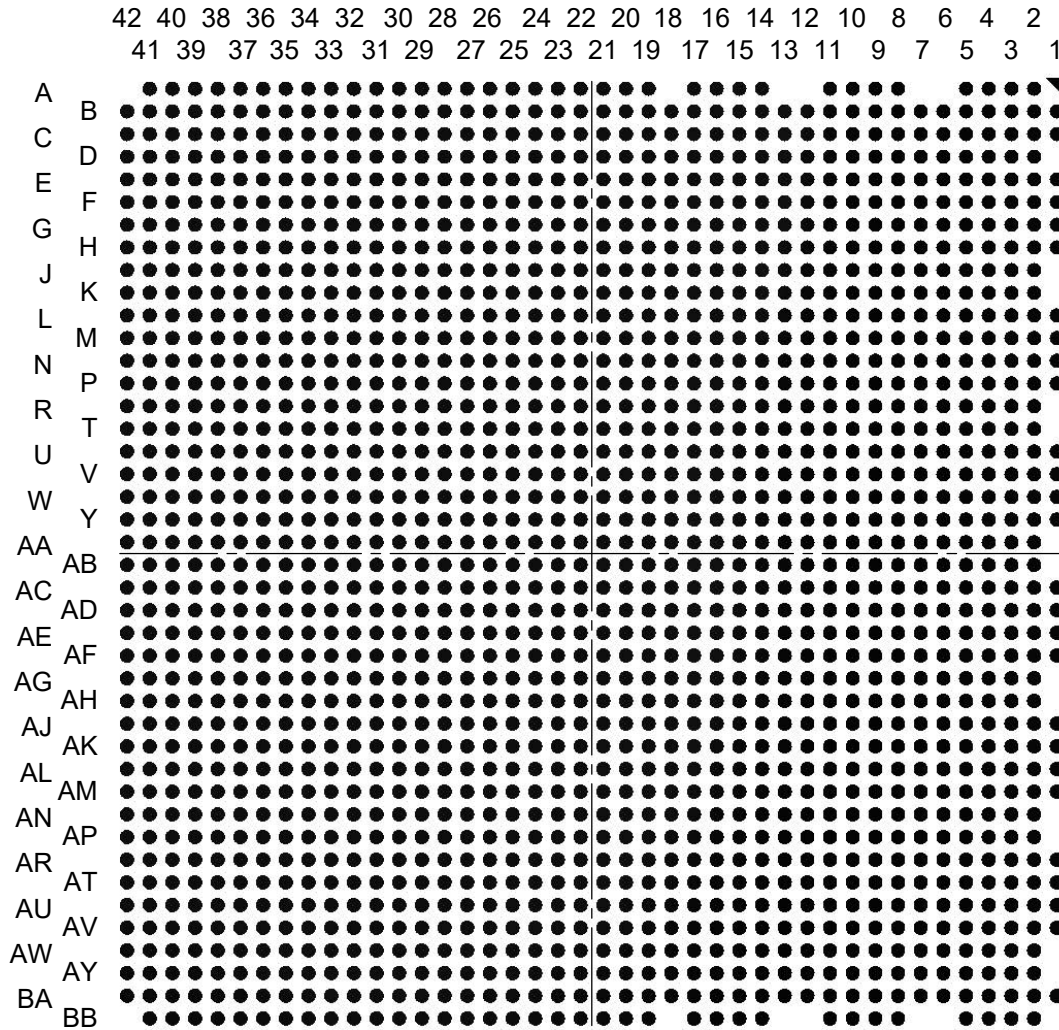
DIMENSION TABLE				
H	L MAX	Z	W	DWG
3.00mm 0.118"	1.52mm 0.060"	3.10mm 0.122"	0.8mm 0.032"	120152
4.02mm 0.158"	2.54mm 0.100"	3.96mm 0.156"	1.82mm 0.072"	120254
4.28mm 0.168"	2.80mm 0.110"	3.96mm 0.156"	2.08mm 0.082"	120280
5.54mm 0.218"	4.06mm 0.160"	4.75mm 0.187"	3.34mm 0.132"	120406



TOLERANCE UNLESS NOTED		APPROVALS	DATE				
X.XX	+/- 0.005	DRAWN J. Hines	4/14/2016				
X.XXX	+/- 0.002	ENG M. Hart	4/14/2016	TITLE FP1738 FLIP-PACK™ CCGA COLUMN CARRIER			
X.XXXX	+/- 0.0005	MFG		SCALE 1:1	SIZE A	DRAWING NO. 001424	REV A
ANGLES +/- 0.5° ALL DIMENSIONS IN <input checked="" type="checkbox"/> INCHES <input type="checkbox"/> MILLIMETERS		THIRD ANGLE PROJECTION		DO NOT SCALE DRAWING		SHEET 1 OF 11	
		QA					
		CUST					
		REVISED					

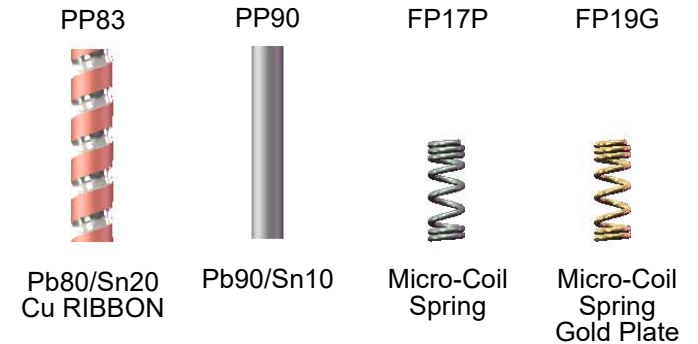
PART NUMBER TABLE

PIN-PACK™	Pins	Pitch	Matrix	COLUMN				Empty DWG	Filled DWG
				Alloy	Construction	∅ Dia	Length		
FP83C1738E15x91A FP90U1738E15x91A FP19G1738E16x40A FP17P1738E16X40A	1738	1.0mm	42x42	Pb80 Pb90 MCS MCS	Cu Ribbon Plain Micro Coil Micro Coil	0.38mm 0.40mm	2.31mm 2.31mm 1.00mm	001424	831424 901424 191424 171424



BOTTOM
COUNTERSINK SIDE

EXAMPLES OF COLUMNS

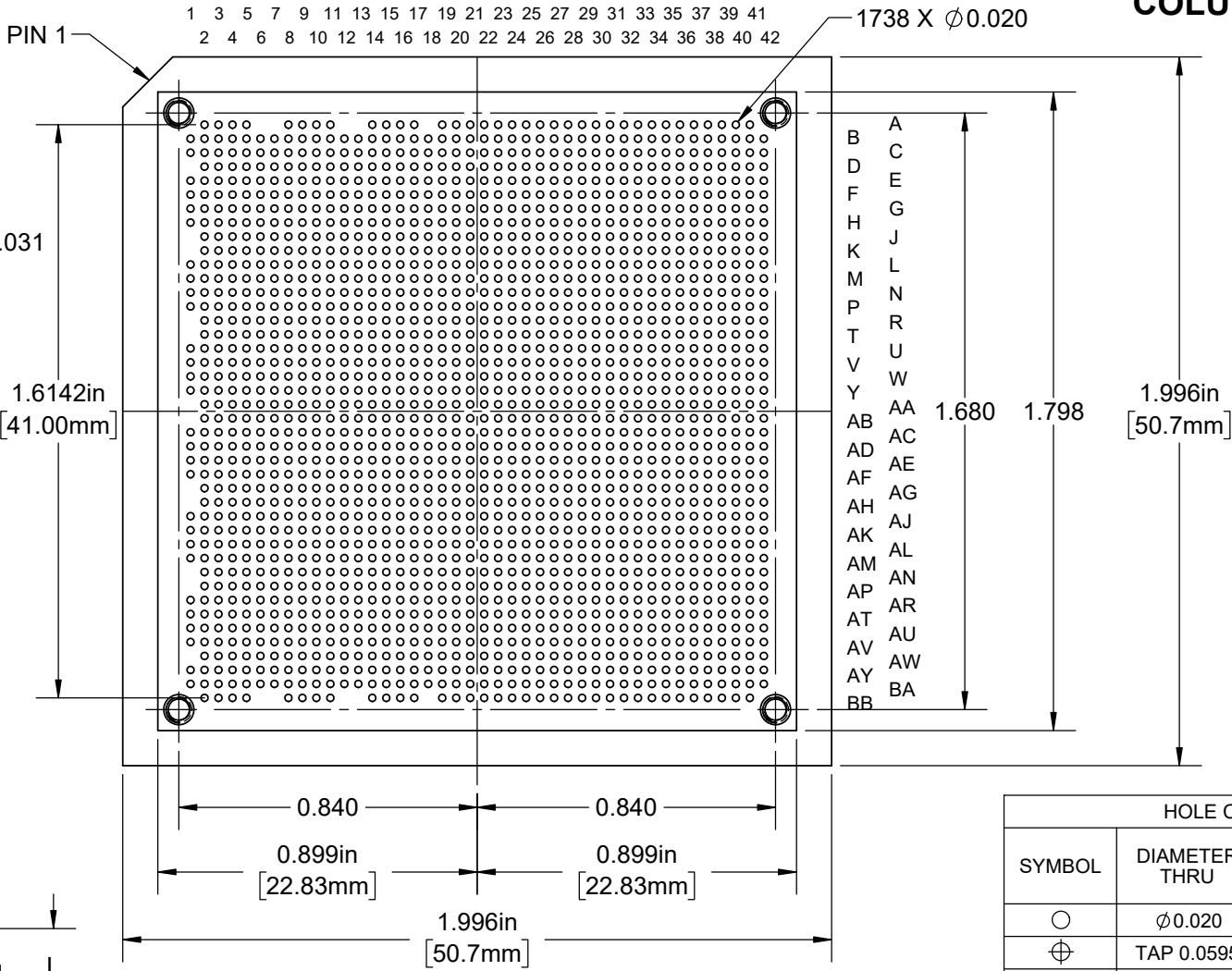
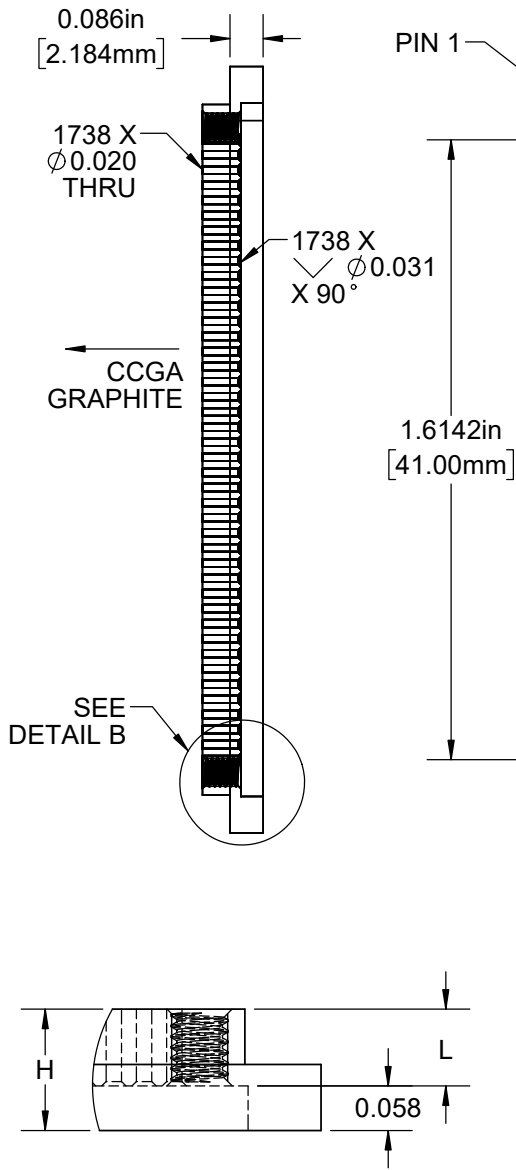


TopLine®			
TITLE FP1738 FLIP-PACK™ CCGA COLUMN CARRIER			
SCALE 1:1	SIZE A	DRAWING NO. 001424	REV A
DO NOT SCALE DRAWING			SHEET 2 OF 11

SIDE VIEW

TOP VIEW

ARRAY OF COLUMNS



HOLE CHART			
SYMBOL	DIAMETER THRU	COUNTER SINK	QTY
○	Ø0.020	-	1738
⊕	TAP 0.0595	-	4
THREAD	#1-72	-	4
◎	-	Ø0.031	1738
TOTAL			3484

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[®]

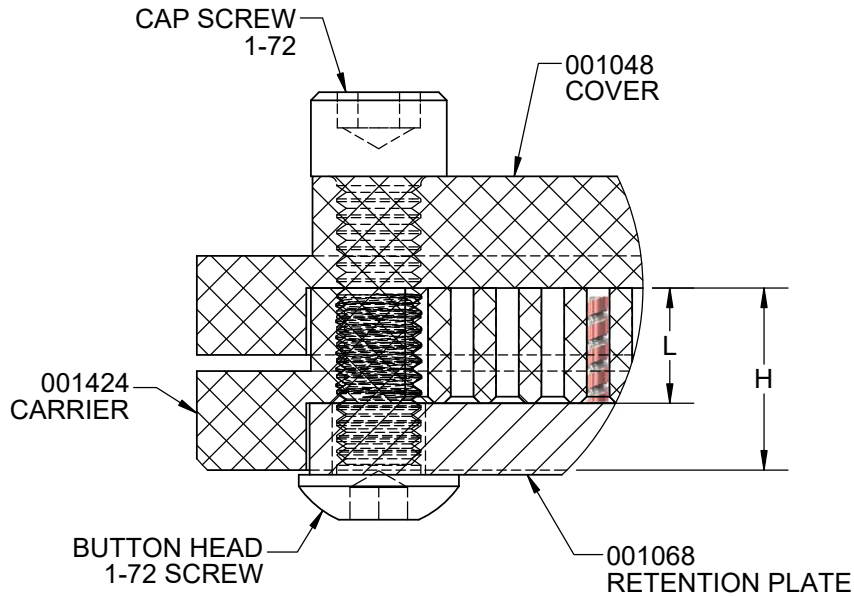
TITLE: FP1738 FLIP-PACK™
CCGA COLUMN CARRIER

SCALE: 2:1	SIZE: A	DRAWING NO.: 001424	REV: A
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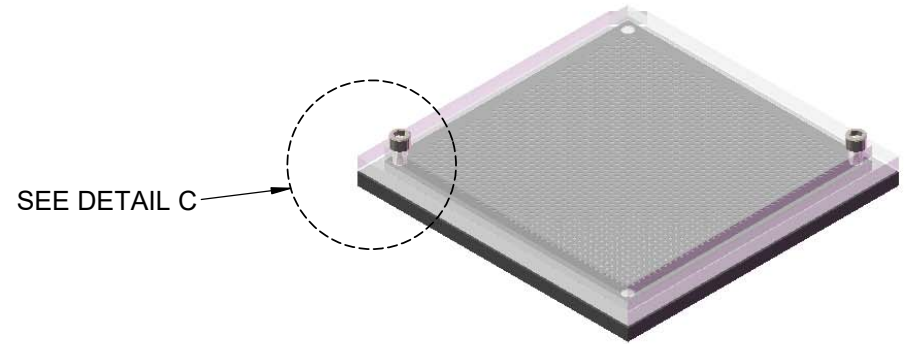
DO NOT SCALE DRAWING SHEET 3 OF 11

NOTES: (UNLESS OTHERWISE SPECIFIED).
 1) MATERIAL: BLACK PLASTIC, CONDUCTIVE.
 2) DIMENSIONS: INCH [MM].

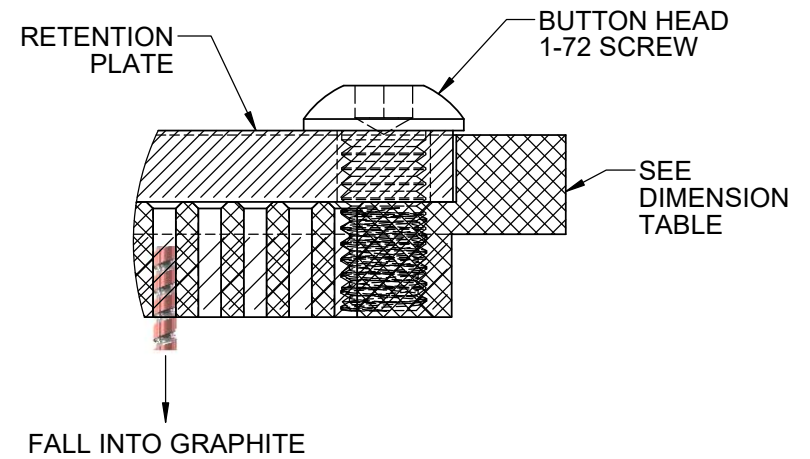
**DETAIL C
WITH COVER PLATE
SCALE=6:1**



MODEL



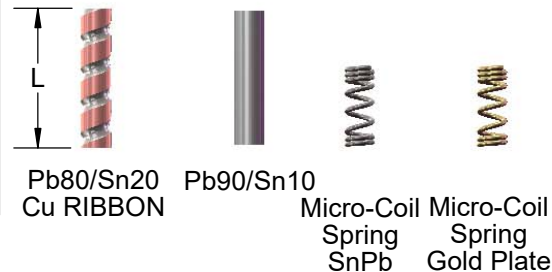
**SHOWN INVERTED
WITHOUT COVER PLATE
SCALE=6:1**



DIMENSION TABLE

H CARRIER HEIGHT	L COLUMN MAX	BUTTON HEAD SCREW	SCREW COVER	DWG CARRIER
3.00mm 0.118"	1.52mm 0.060"	3.10mm 0.122"	6.35mm 0.250"	120152
4.02mm 0.158"	2.54mm 0.100"	3.96mm 0.156"	6.35mm 0.250"	120254
4.28mm 0.168"	2.80mm 0.110"	3.96mm 0.156"	6.35mm 0.250"	120280
5.54mm 0.218"	4.06mm 0.160"	4.75mm 0.187"	6.35mm 0.250"	120406

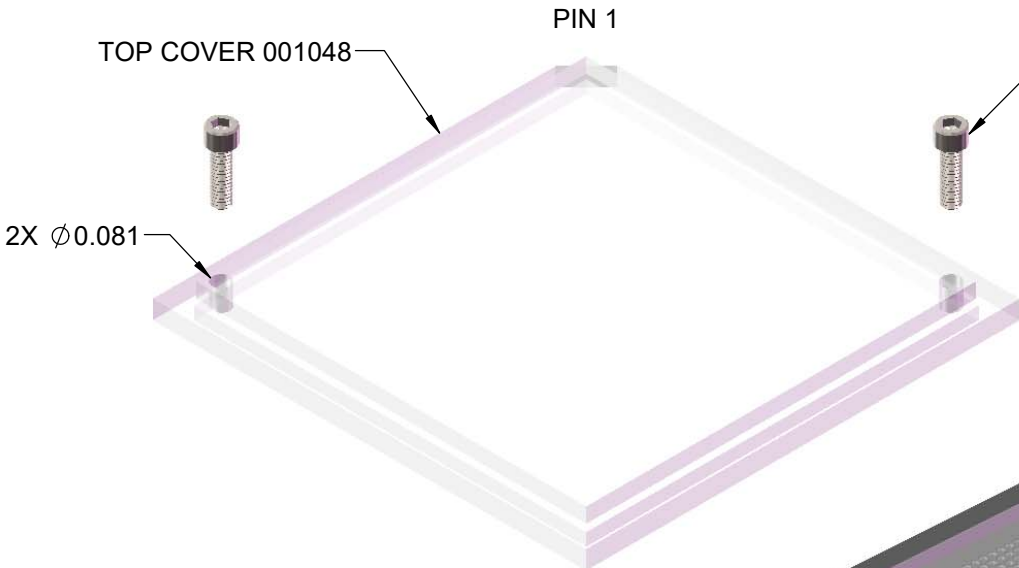
EXAMPLE OF COLUMNS



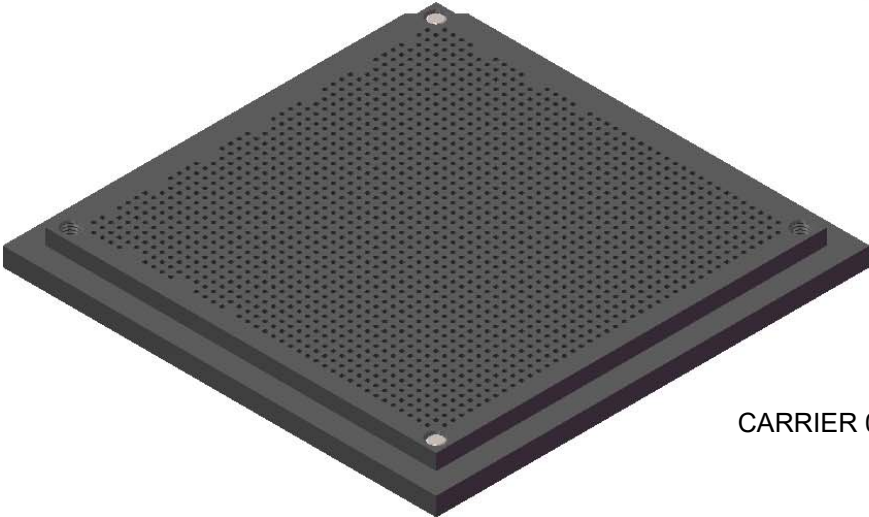
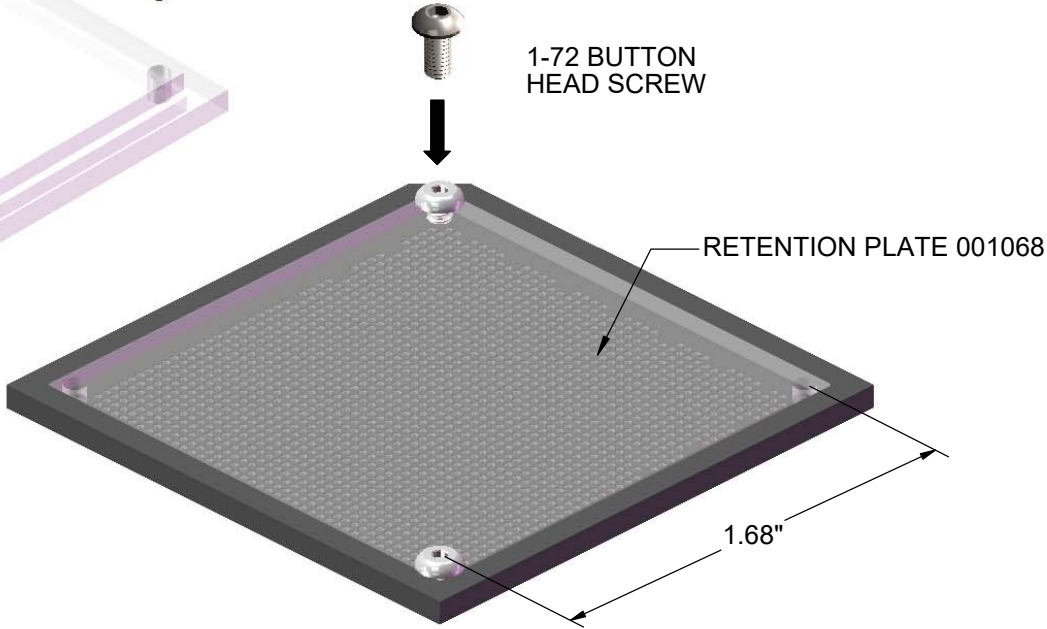
TITLE FP1738 FLIP-PACK™ CCGA COLUMN CARRIER			
SCALE 1:1	SIZE A	DRAWING NO. 001424	REV A
DO NOT SCALE DRAWING		SHEET 4 OF 11	

FLIP PACK MODEL

TOP VIEW



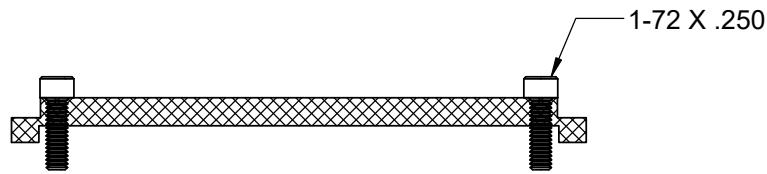
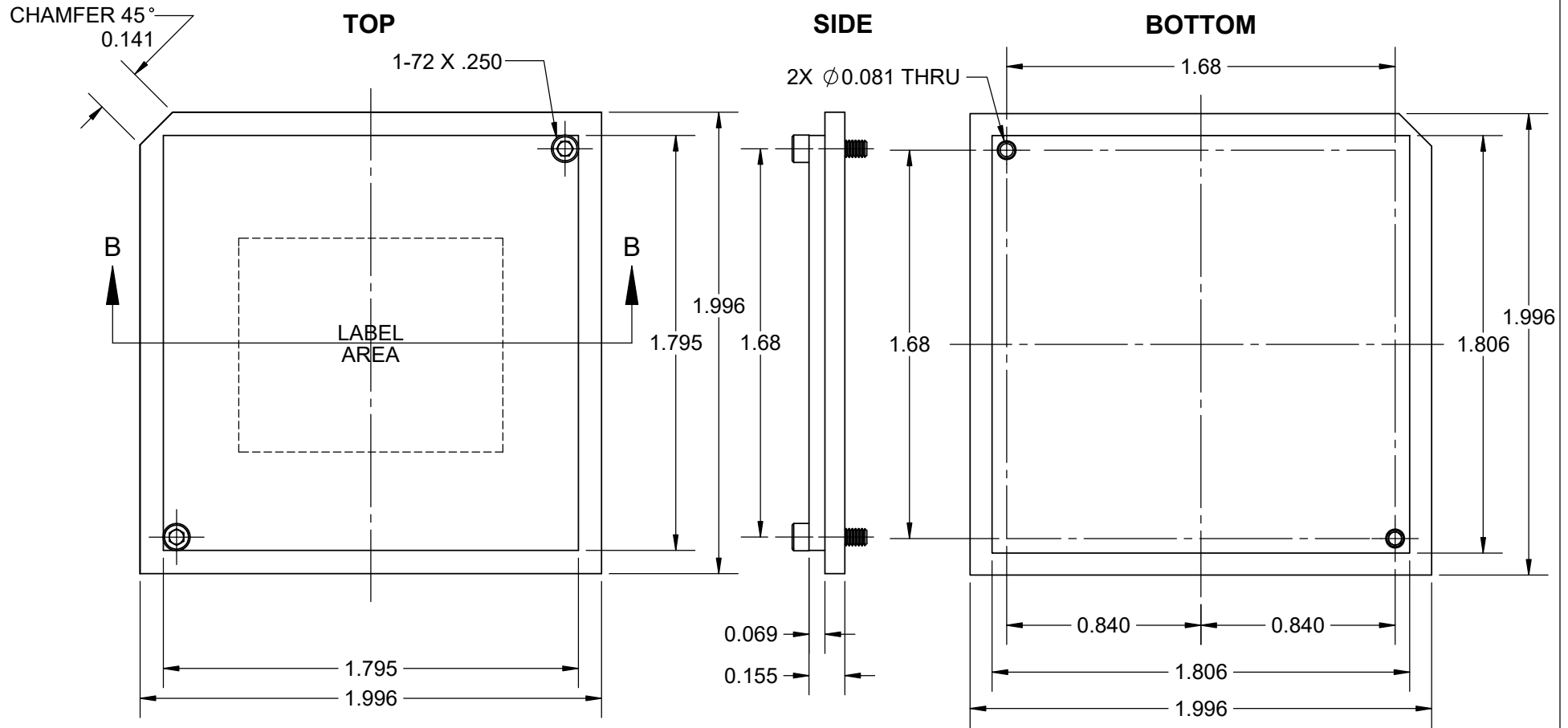
BOTTOM VIEW



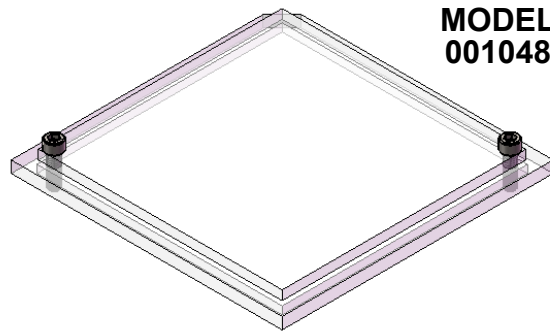
CARRIER 001424

TopLine [®]			
TITLE FP1738 FLIP-PACK™ CCGA COLUMN CARRIER			
SCALE 1:1	SIZE A	DRAWING NO. 001424	REV A
DO NOT SCALE DRAWING		SHEET 5 OF 11	

SHOWN WITH SCREWS



SECTION B-B

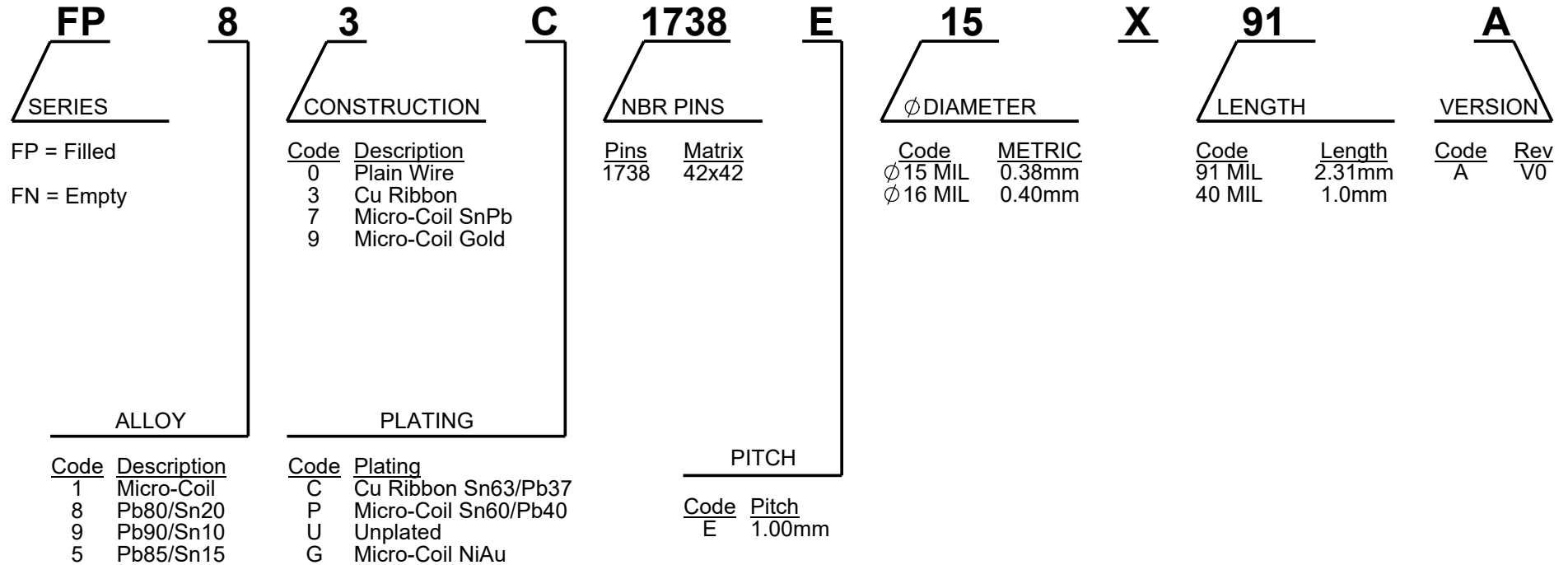


NOTES: (UNLESS OTHERWISE SPECIFIED).

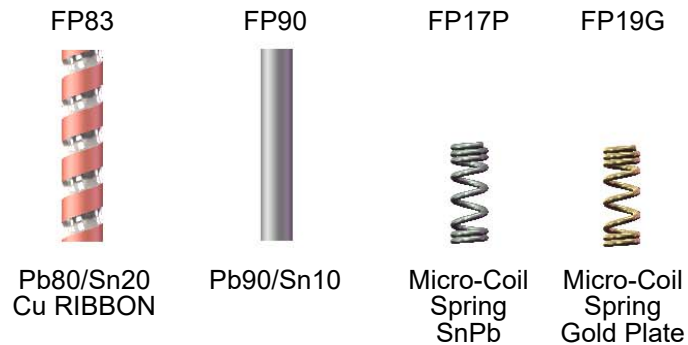
- 1) DIMENSIONS: INCH.
- 2) MATERIAL: TRANSPARENT PMMA PLASTIC.
- 3) ANTISTATIC: $10^{12} \Omega$ SURFACE RESISTANCE.

TopLine ®			
TITLE FP1738 FLIP-PACK™ CCGA COLUMN CARRIER			
SCALE 1:1	SIZE A	DRAWING NO. 001424	REV A
DO NOT SCALE DRAWING		SHEET 7 OF 11	

FLIP-PACK™ PART NUMBERING SYSTEM



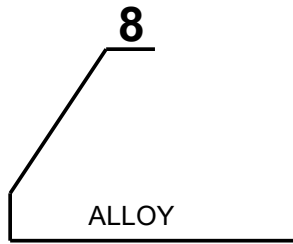
EXAMPLES OF COLUMNS



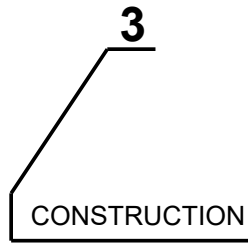
NOTE 1: FP83 AND FP90 REQUIRES TRIMMING TO FINISHED LENGTH.
NOTE 2: COLUMN TO BE TRIMMED TO 2.21mm AFTER ATTACHMENT.

TopLine ®			
TITLE FP1738 FLIP-PACK™ CCGA COLUMN CARRIER			
SCALE 1:1	SIZE A	DRAWING NO. 001424	REV A
DO NOT SCALE DRAWING			SHEET 8 OF 11

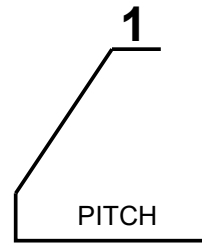
FLIP-PACK™ DRAWING NUMBERING SYSTEM



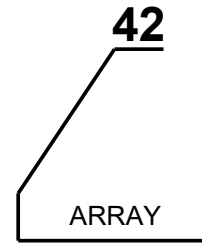
Code	Description
00	Empty
1	Micro-Coil
8	Pb80/Sn20
9	Pb90/Sn10
5	Pn85/Sn15



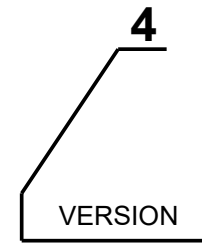
Code	Description
0	Plain Wire
3	Cu Ribbon
7	Micro-Coil SnPb
9	Micro-Coil Gold



Code	Pitch
1	1.0mm



Code	Matrix
42	42x42



Code	Rev
4	1738 PINS Ø0.38mm

EXAMPLES OF COLUMNS

FP83



Pb80/Sn20
Cu RIBBON

FP90



Pb90/Sn10

FP17P



Micro-Coil
Spring
SnPb

FP19G



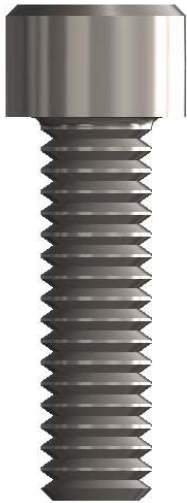
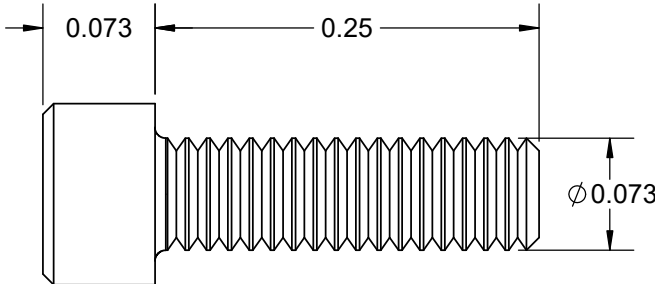
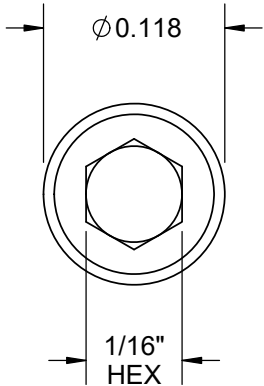
Micro-Coil
Spring
Gold Plate

TopLine®

TITLE			
SCALE 10:1	SIZE A	DRAWING NO. 001422	REV
DO NOT SCALE DRAWING			SHEET 9 OF 11

HARDWARE CAP SCREW

MODELS



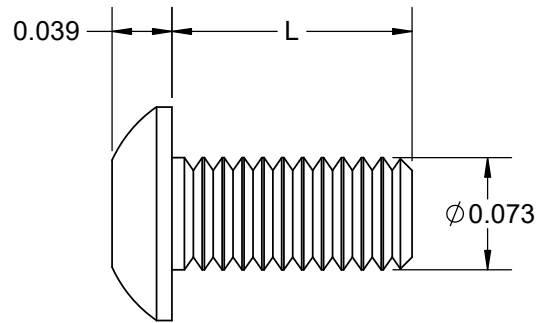
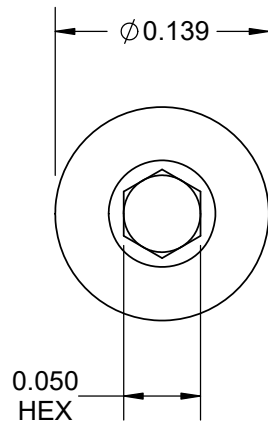
- NOTES:
 1. DIMENSIONS INCHES (UNLESS OTHERWISE SPECIFIED).
 2. SHAFT MATERIAL: SEE TABLE.
 3. HEAD: SEE TABLE.
 3. COLOR: STAINLESS.

DRILL TABLE						
MATERIAL	THREAD	MAX OD	TAP DRILL Start Hole	CL HOLE Loose Fit	CL HOLE Close Fit	DWG
STAINLESS	1-72	0.073"	0.059"	0.089"	0.081"	707225

TopLine [®]			
TITLE FP1738 FLIP-PACK™ CCGA COLUMN CARRIER			
SCALE 8:1	SIZE A	DRAWING NO. 001424	REV A
DO NOT SCALE DRAWING			SHEET 10 OF 11

BUTTON HEAD 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	STAINLESS	1-72	0.073"	0.0595"	0.125"	707212
STAINLESS	STAINLESS	1-72	0.073"	0.0595"	0.156"	707216
STAINLESS	STAINLESS	1-72	0.073"	0.0595"	0.187"	707218

TopLine[®]

TITLE FP1738 FLIP-PACK™
CCGA COLUMN CARRIER

SCALE 8:1	SIZE A	DRAWING NO. 001424	REV A
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DO NOT SCALE DRAWING

SHEET 11 OF 11