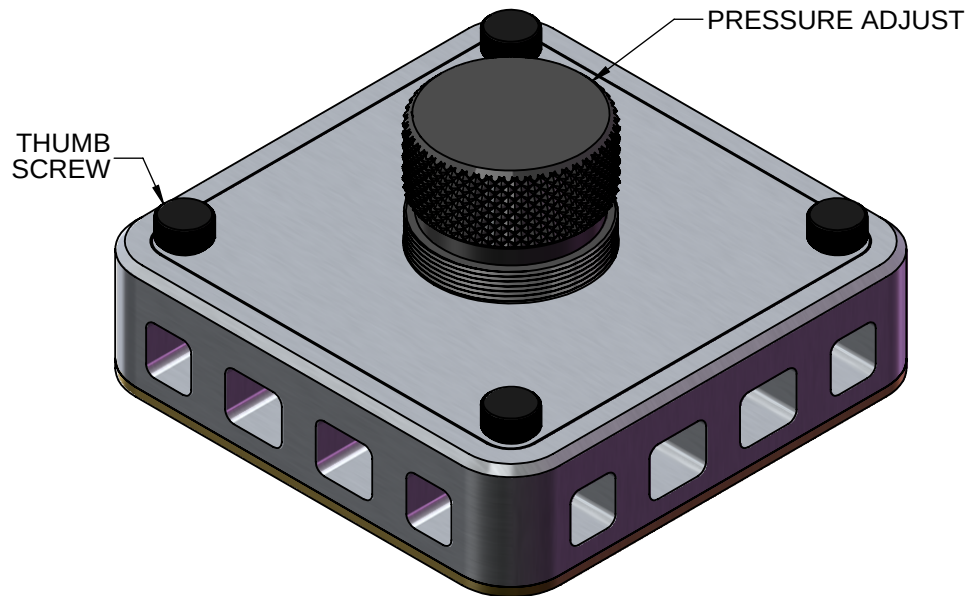
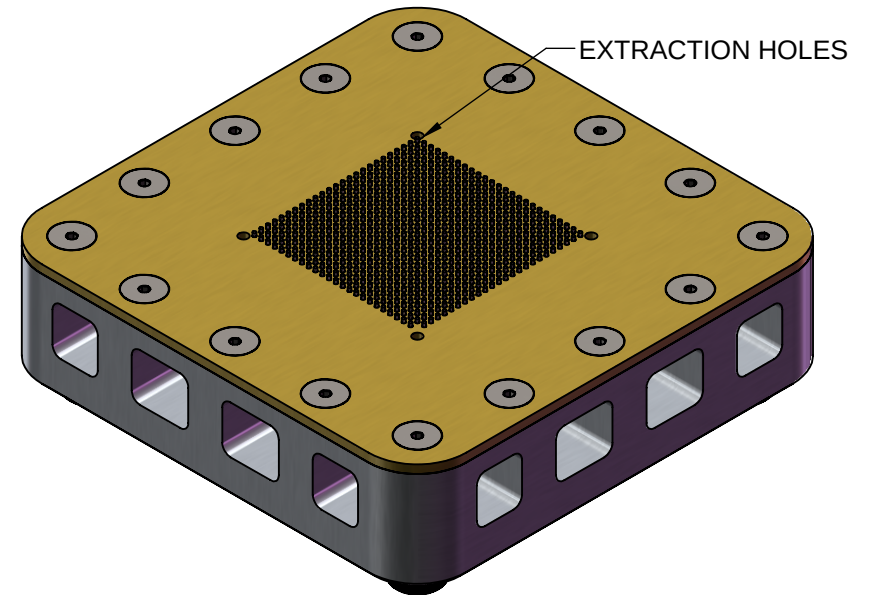


MODELS

TOP VIEW



ARRAY PLATE



APPROVALS	DATE				
DRAWN T.Au	9/25/2018				
ENG M. Hart	9/25/2018	TITLE C7-PLANAR-624-A CCGA LAPPING HOLDER			
MFG					
QA		SCALE 1:1	SIZE A	DRAWING NO. 700258	REV A
CUST					
REVISED		DO NOT SCALE DRAWING			SHEET 1 OF 13

EXPLODED VIEW

PRESSURE
ADJUSTMENT
KNOB
DWG 700200

TOP PLATE
DWG 700241

CLOSURE
KNOBS DWG 704028

CCGA

COLUMNS

SHIM FOR
COLUMN HEIGHT

BRASS
ARRAY PLATE
DWG 701258

ALUMINUM
FRAME
DWG 700240

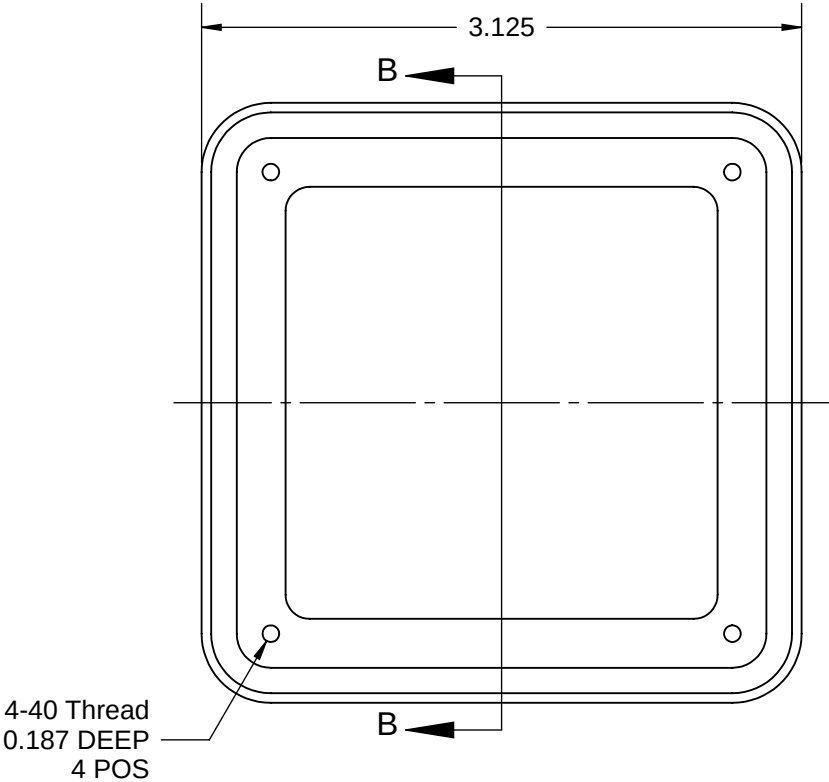


TITLE C7-PLANAR-624-A
CCGA LAPPING HOLDER

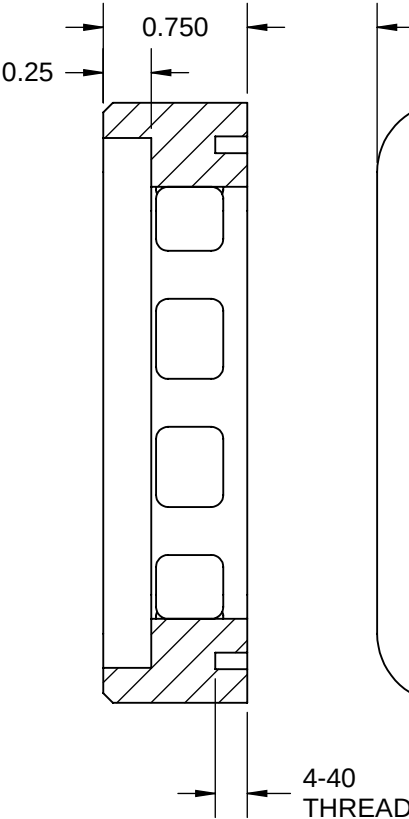
SCALE 1:1.25	SIZE A	DRAWING NO. 700258	REV A
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ALUMINUM FRAME

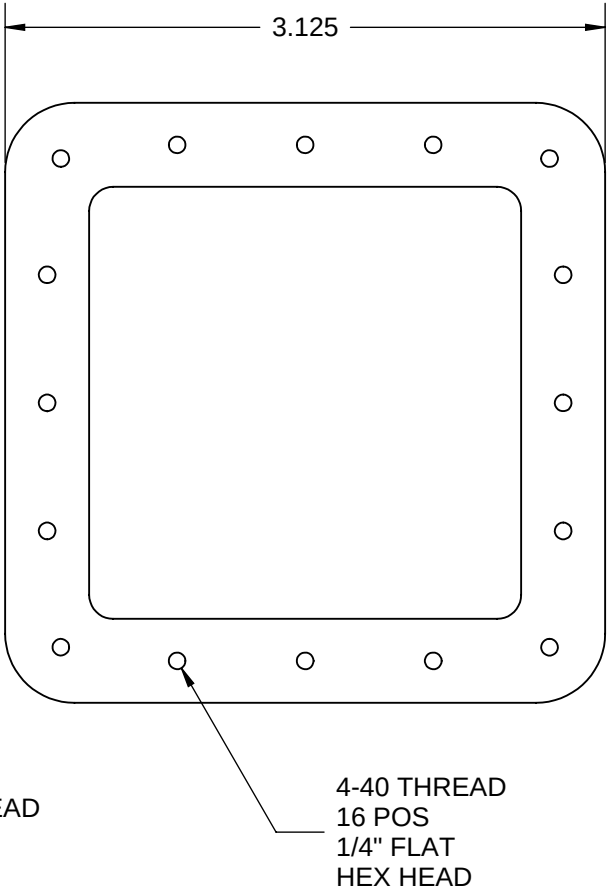
TOP



EDGE



BOTTOM

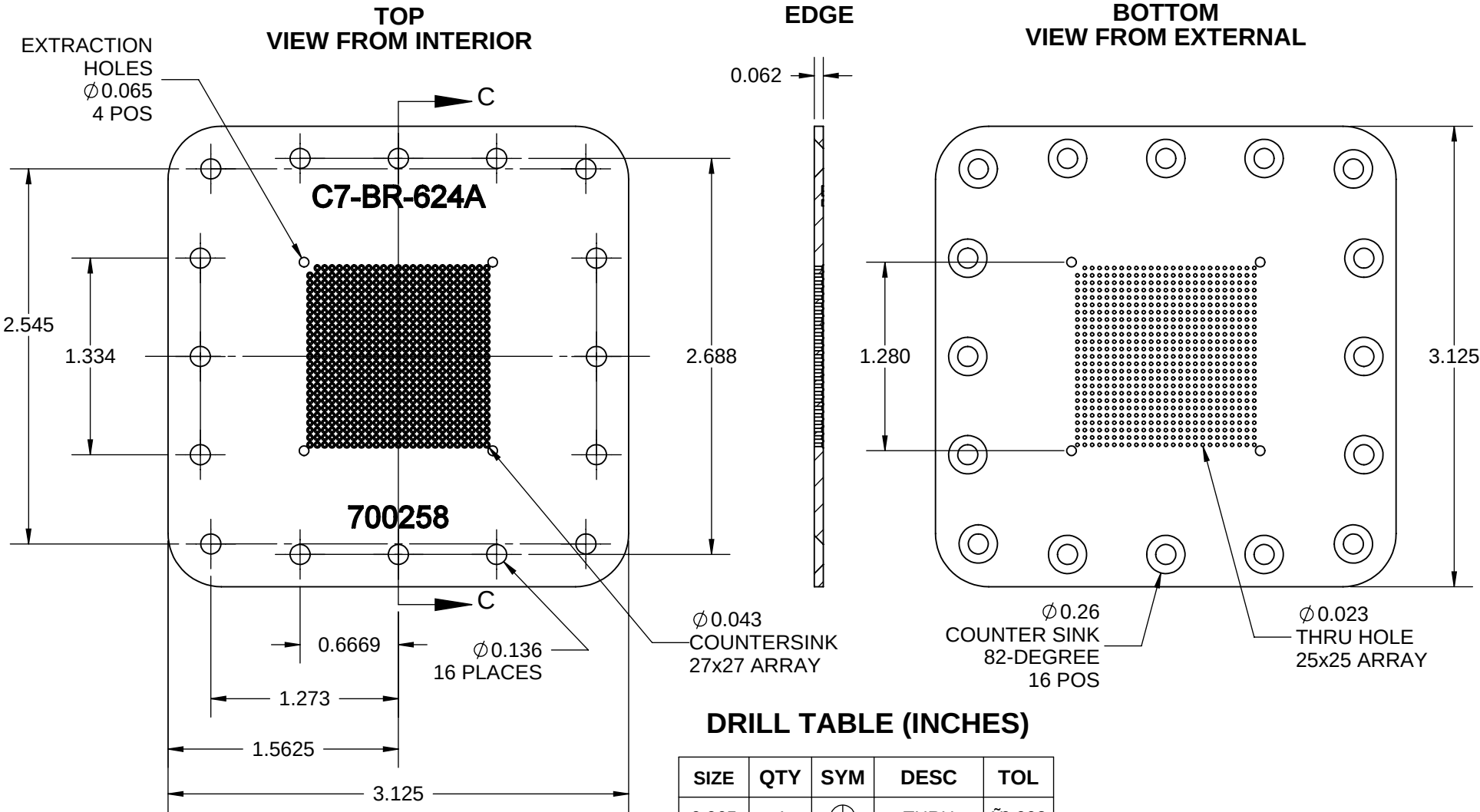


TopLine[®]

TITLE C7-PLANAR-624-A
CCGA LAPPING HOLDER

SCALE	SIZE	DRAWING NO.	REV
1:1	A	700258	A

BRASS ARRAY PLATE



DRILL TABLE (INCHES)

SIZE	QTY	SYM	DESC	TOL
0.065	4	⊕	THRU	±0.002
0.023	624	○	THRU	±0.001
0.043	624	⊙	COUNTER SINK	±0.004
0.136	16	○	THRU	±0.002

NOTES:
1. EXTRACTION HOLES POSITIONED AT 4 CORNERS OF CCGA.

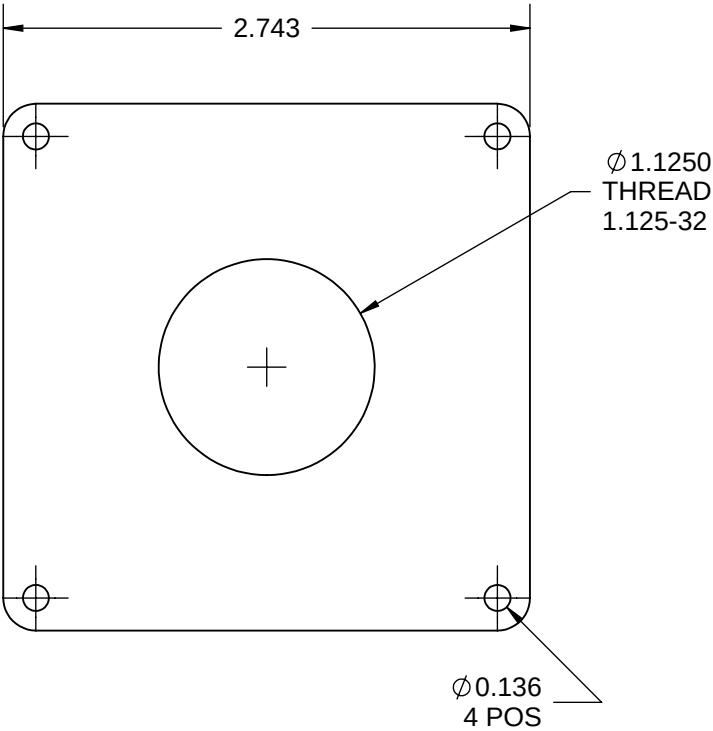
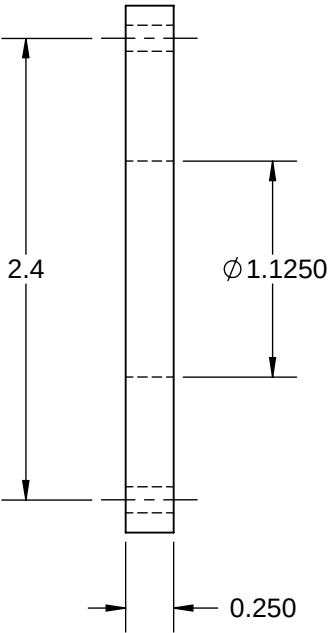
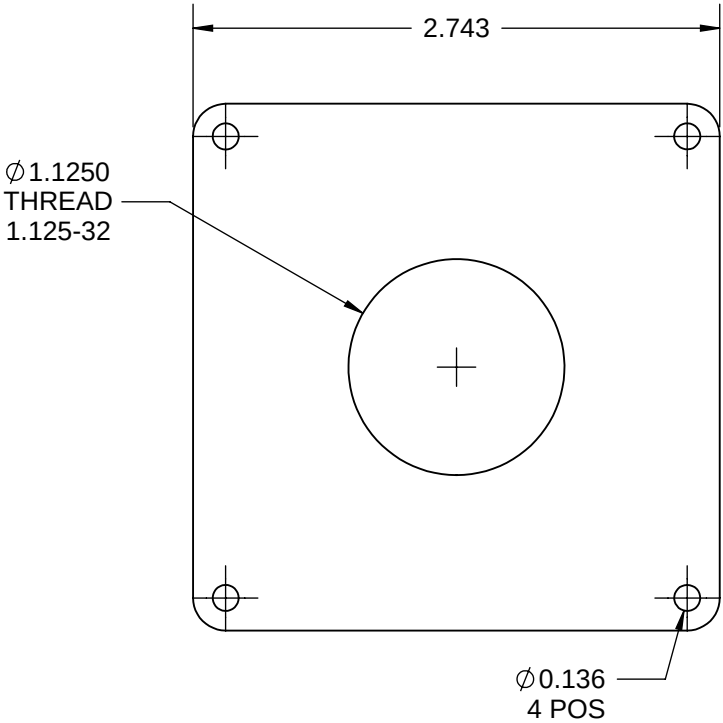
TopLine®			
TITLE C7-PLANAR-624-A CCGA LAPPING HOLDER			
SCALE 1:1	SIZE A	DRAWING NO. 700258	REV A
DO NOT SCALE DRAWING			SHEET 4 OF 13

TOP PLATE

TOP

EDGE

BOTTOM

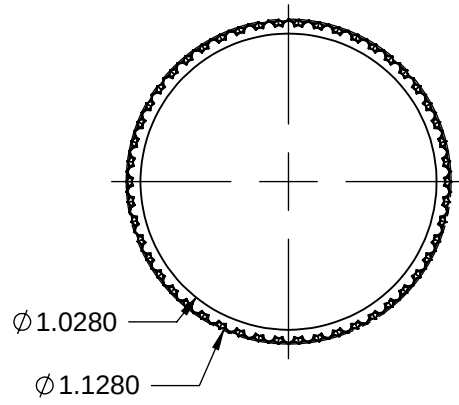


NOTES:
1) CONTROLLING DIMENSION IS INCHES.
2) MATERIAL: ALUMINUM.

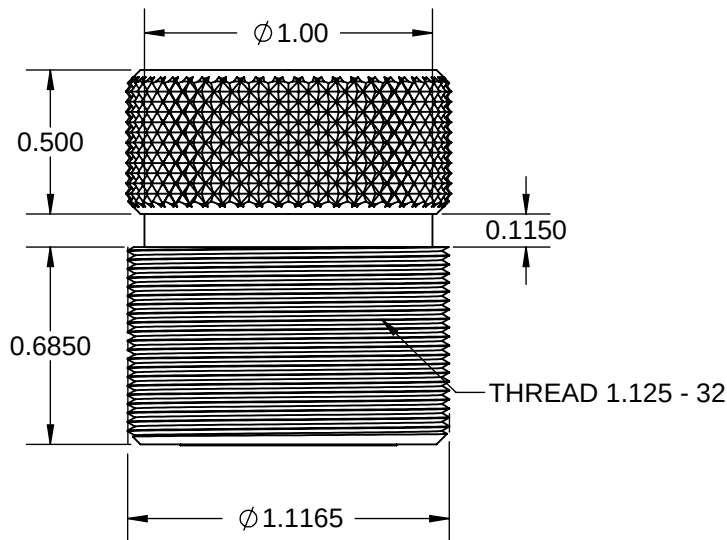
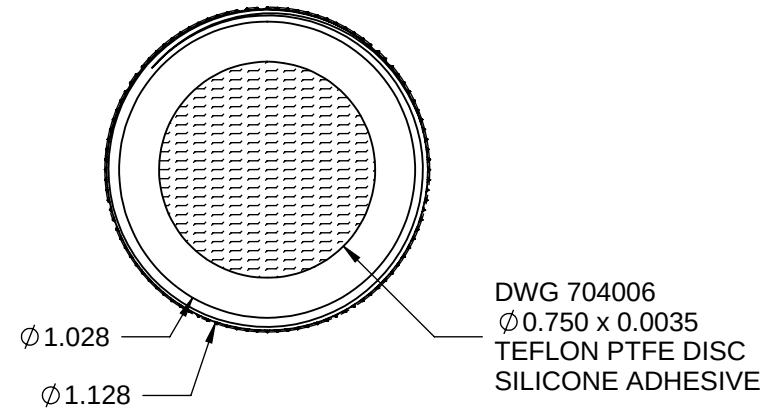
TopLine®			
TITLE C7-PLANAR-624-A CCGA LAPPING HOLDER			
SCALE 1:1	SIZE A	DRAWING NO. 700258	REV A
DO NOT SCALE DRAWING			SHEET 5 OF 13

PRESSURE ADJUSTMENT KNOB

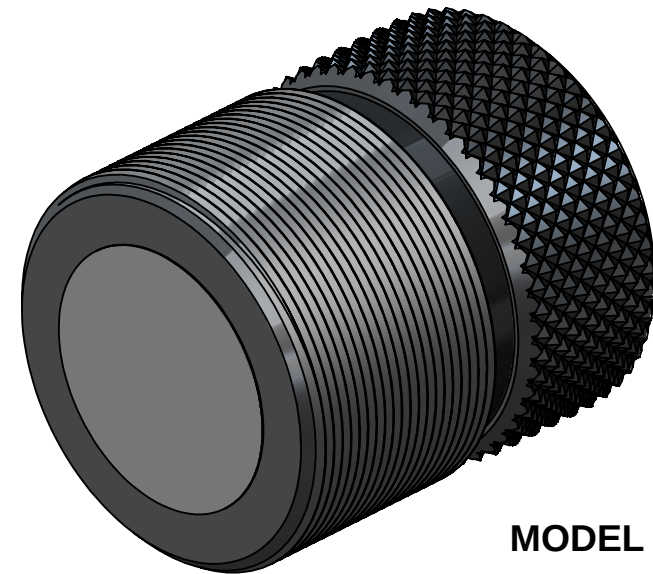
TOP



BOTTOM



SIDE



MODEL

NOTES:

1. MATERIAL: Acetal Resin Homopolymer.
2. COLOR: BLACK.

TopLine

TITLE C7-PLANAR-624-A
CCGA LAPPING HOLDER

SCALE 3:2	SIZE A	DRAWING NO. 700202	REV A
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DO NOT SCALE DRAWING

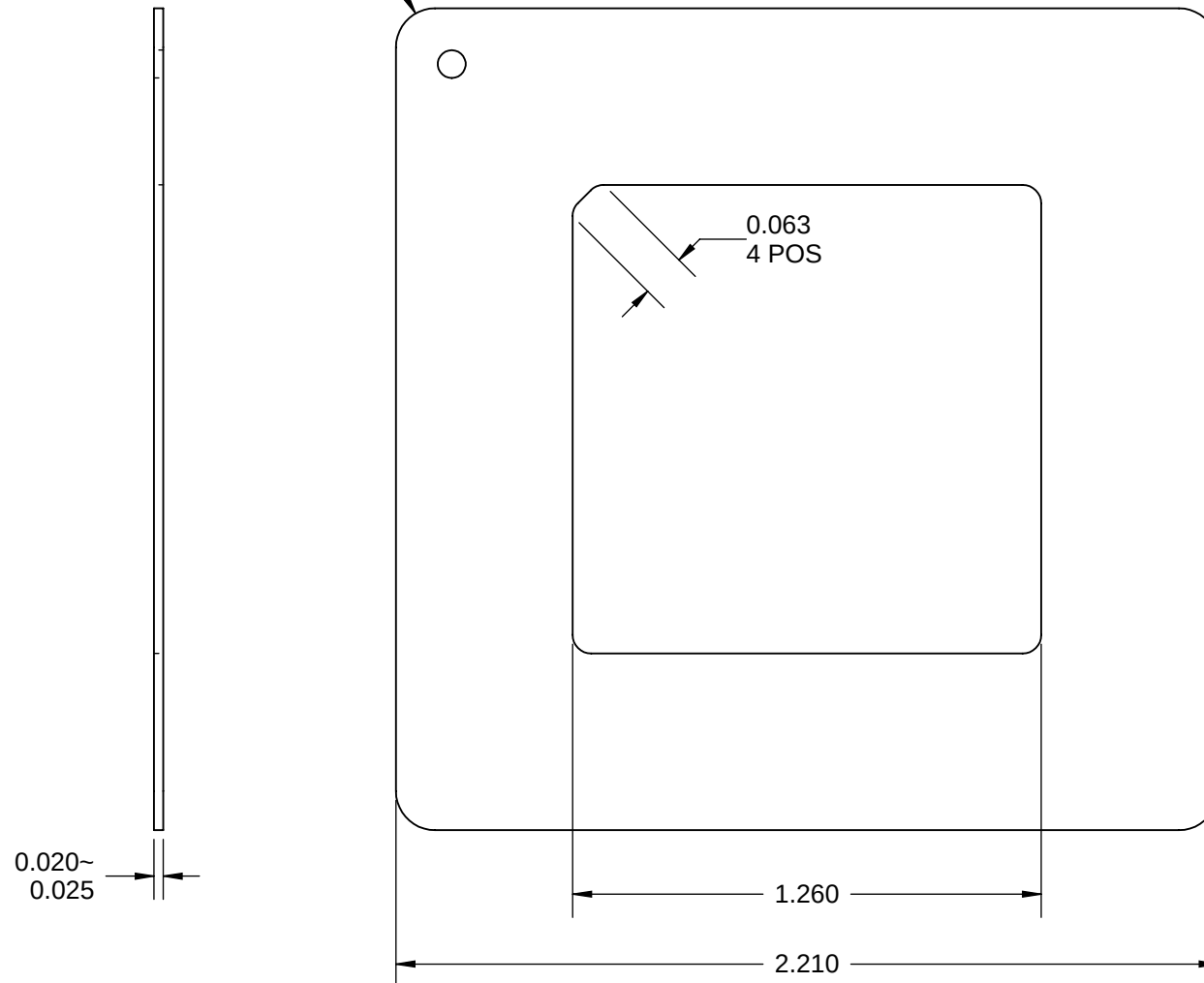
SHEET 6 OF 13

SIDE

R0.105
4 POS

TOP

SHIM FOR COLUMN LENGTH ADJUSTMENT



NOTES:

- 1) CONTROLLING DIMENSION IS INCHES
- 2) COLUMN LENGTH IS EQUAL TO THE THICKNESS OF THE SHIM PLUS THE THICKNESS OF BRASS ARRAY PLATE.
- 3) SHIM MATERIAL BRASS OR PLASTIC.

SHIM THICKNESS TABLE

COLUMN (L)		SHIM DIMENSION		DWG
0.087"	2.21mm	0.020"	0.50mm	720258
0.087"	2.21mm	0.025"	0.63mm	725258

CONTACT TOPLINE FOR OTHER SHIM THICKNESS.



COLUMN
LENGTH
AFTER
PLANARIZING

TopLine®

TITLE C7-PLANAR-624-A
CCGA LAPPING HOLDER

SCALE
2:1

SIZE
A

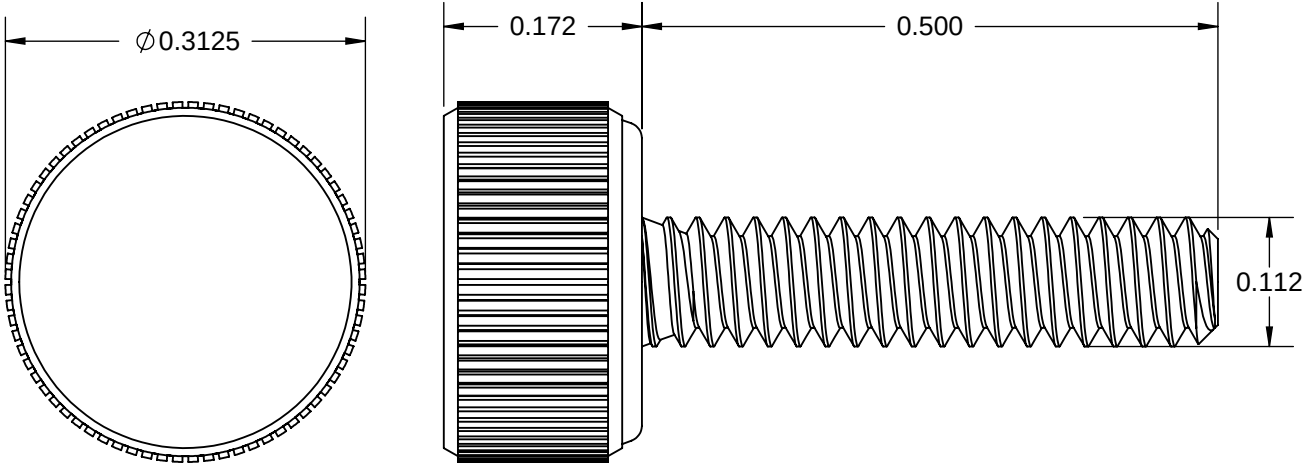
DRAWING NO.
700258

REV
A

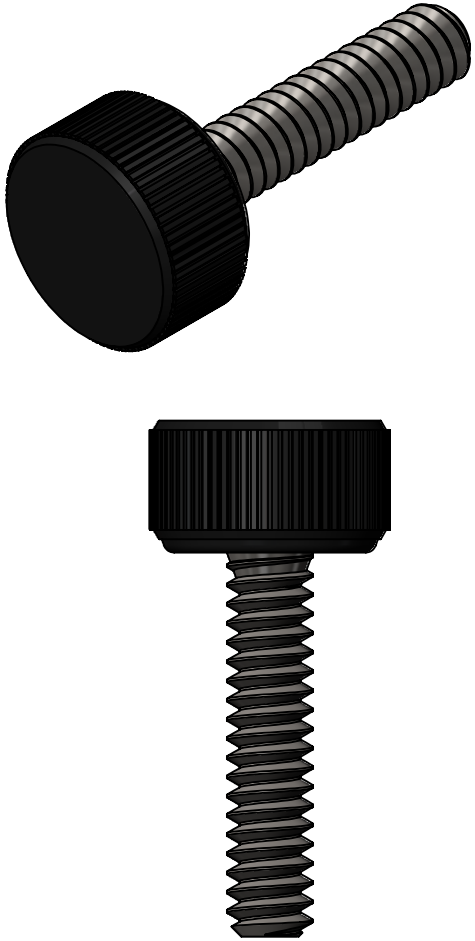
DO NOT SCALE DRAWING

SHEET 7 OF 13

HARDWARE
PLASTIC KNURLED HEAD THUMB SCREW



MODELS

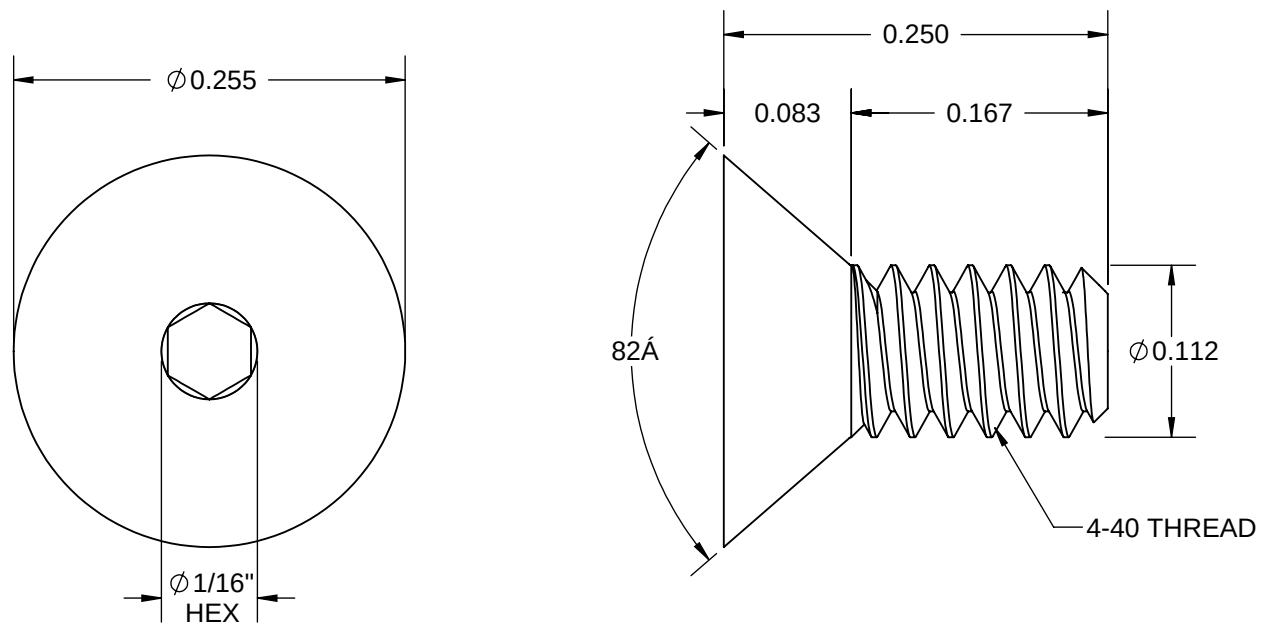


- NOTES:
- 1. DIMENSIONS INCHES (UNLESS OTHERWISE SPECIFIED).
 - 2. SHAFT MATERIAL 18-8 STAINLESS STEEL.
 - 3. HEAD: PLASTIC.
 - 4. COLOR: SEE TABLE.

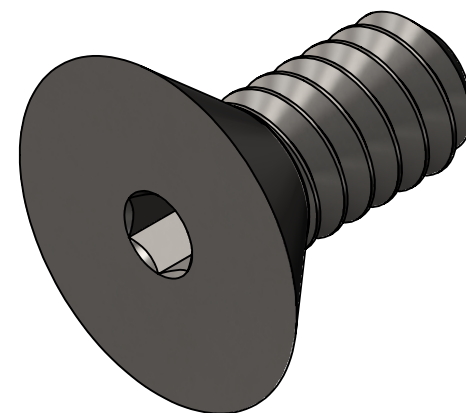
DRILL TABLE						
HEAD COLOR	THREAD	MAX OD	TAP DRILL Start Hole	CL HOLE Loose Fit	L SHAFT	DWG
BLACK	4-40	0.112"	0.089"	0.136"	0.500	704028

TopLine®			
TITLE KNURL THUMB SCREW 4-40 PLASTIC HEAD .500" L			
SCALE 6:1	SIZE A	DRAWING NO. 704028	REV A
DO NOT SCALE DRAWING			SHEET 8 OF 13

HARDWARE FLAT HEAD SOCKET CAP SCREW



MODELS

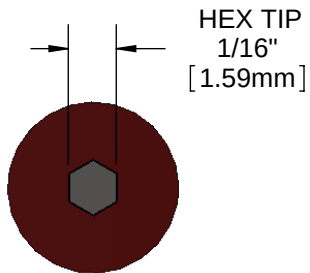
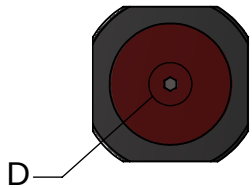


- NOTES:
1. DIMENSIONS INCHES (UNLESS OTHERWISE SPECIFIED).
 2. SHAFT MATERIAL: SEE TABLE.
 3. HEAD: SEE TABLE.
 4. COLOR: STAINLESS.

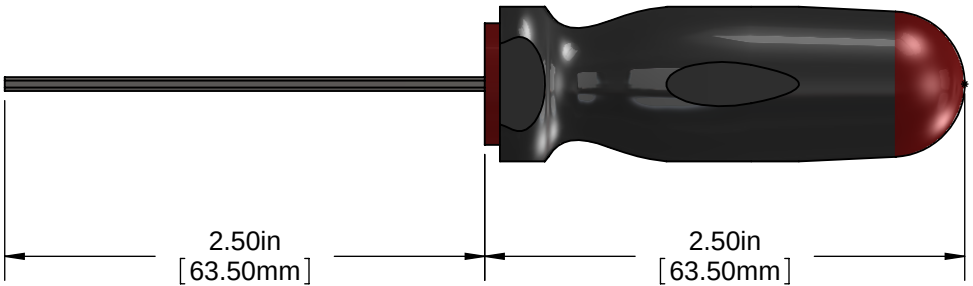
DRILL TABLE						
MATL	THREAD	MAX OD	TAP DRILL Start Hole	CL HOLE Loose Fit	L SHAFT	DWG
STAINLESS 316	4-40	0.112"	0.089"	0.136"	0.167"	704038

TopLine®			
TITLE FLAT HEX HEAD SCREW 4-40 x 3/16"			
SCALE 6:1	SIZE A	DRAWING NO. 704038	REV A
DO NOT SCALE DRAWING			SHEET 9 OF 13

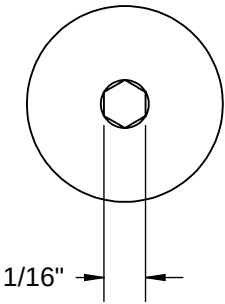
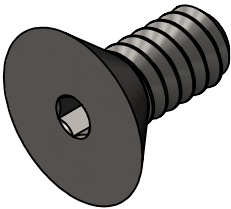
SCREW DRIVER
HEX 1/16



DETAIL A
SCALE 4:1



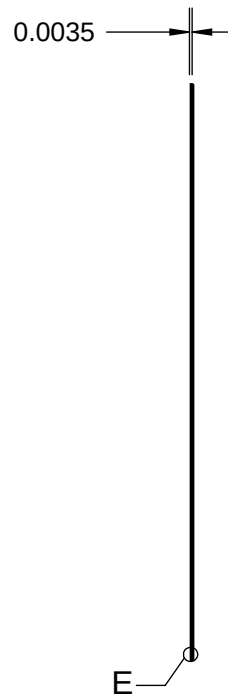
EXAMPLE SCREW
HEX 1/16"
SCALE = 4:1



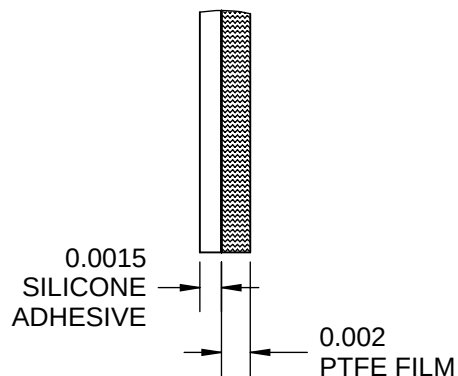
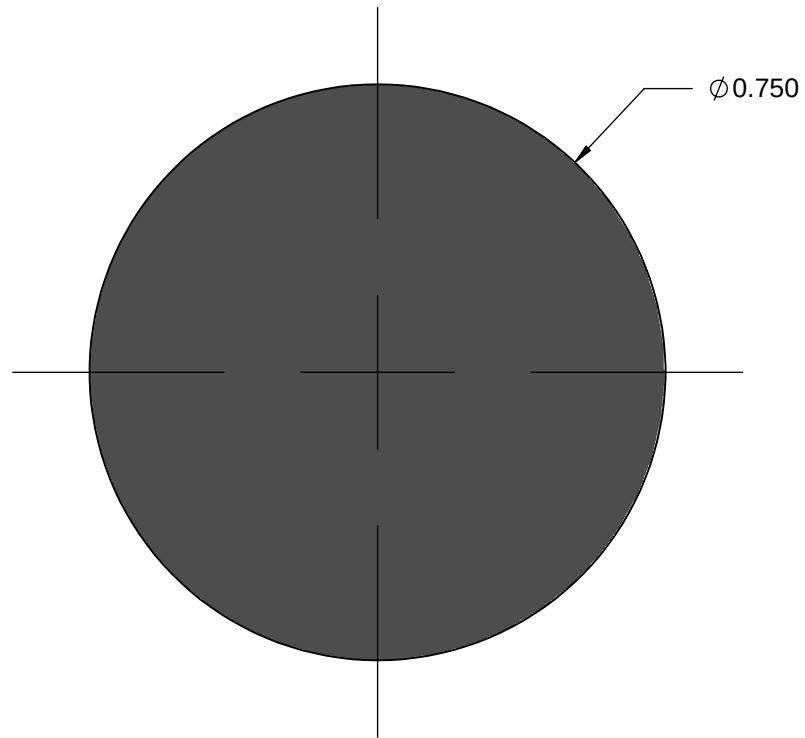
NOTES: (UNLESS OTHERWISE SPECIFIED).
1) DIMENSIONS: INCH [MM].

TopLine®			
TITLE		SCREW DRIVER 1/16 HEX HEAD	
SCALE 1:1	SIZE A	DRAWING NO. 704000	REV A
DO NOT SCALE DRAWING			SHEET 10 OF 13

PTFE TEFLON DISC



DETAIL E
SCALE 75 : 1



NOTE:
 1) DIMENSIONS INCHES.
 2) COLOR GRAY PTFE FILM DISC.
 3) REPLACE DISC AFTER PROCESSING 50pcs CCGA OR MORE FREQUENTLY, AS REQUIRED.

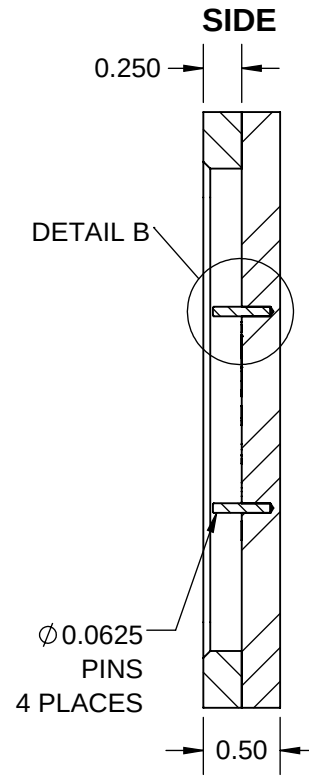
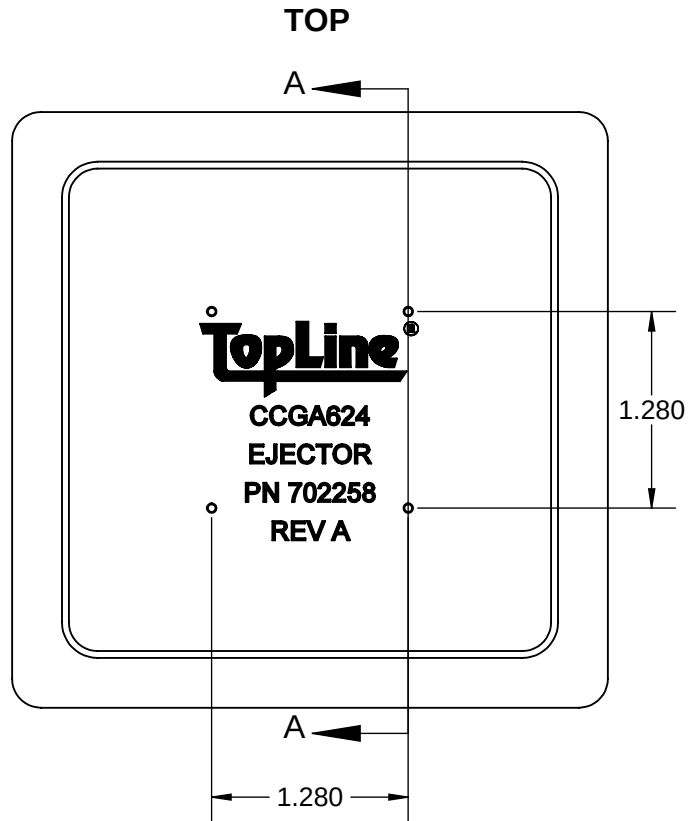
TopLine®			
TITLE		TEFLON DISC PAD 0.75-INCH	
SCALE 4:1	SIZE A	DRAWING NO. 704006	REV A
DO NOT SCALE DRAWING			SHEET 11 OF 13

SPARE PARTS			
NBR	ITEM	DESCRIPTION AND NOTES	DETAIL DWG
1	TEFLON PAD	REDUCES MARRING OF CCGA. REPLACE EVERY 50 CCGA, OR AS REQUIRED	704006
2	SCREW DRIVER	SCREW DRIVER FOR 1/16" HEX HEAD SCREWS ON BRASS PLATE ARRAY	704000
3	FLAT HEAD SCREWS	HEX-FLAT HEAD STAINLESS STEEL SCREWS 4-40 THREAD 1/4" LONG (1/16" HEX SLOT)	704042
4	THUMB SCREWS	PLASTIC KNURL HEAD THUMB SCREWS 4-40 THREAD 1/2" LONG	704028
5	PRESSURE ADJUSTMENT THREADED KNOB	THREADED KNOB SCREW 1.125-32 THREAD	700200
6	C7-SHIM-624-A-20	SHIM 0.020" THICK (0.50mm)	720258
7	C7-SHIM-624-A-25	SHIM 0.025" THICK (0.635mm)	725258
8	BRASS PLATE C7-BR-624A	PATTERN OF ARRAY AND LOCATION OF EXTRACTION HOLES ARE SPECIFIC TO CCGA DEVICE.	701258
9	ALUMINUM FRAME	UNIVERSAL LAPPING TOOL HOLDER 3.125" x 0.750"	700240
10	TOP PLATE	UNIVERSAL TOP PLATE LAPPING TOOL HOLDER 2.743" x 0.250"	700241
11	EJECTION TOOL C7-EJECT-624-A	GENTLY LIFTS CORNERS OF CCGA SUBSTRATE TO EXTRACT AND REMOVE CCGA FROM LAPPING TOOL	702258

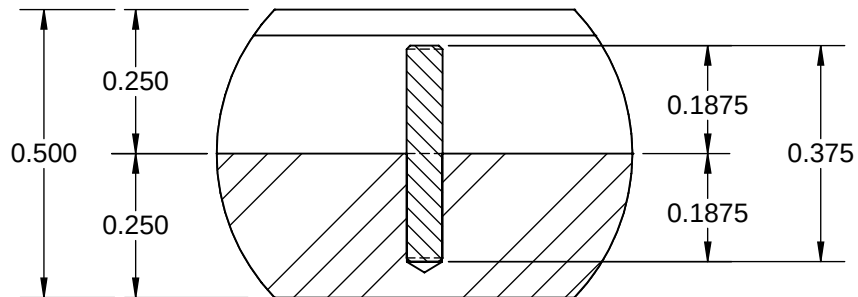
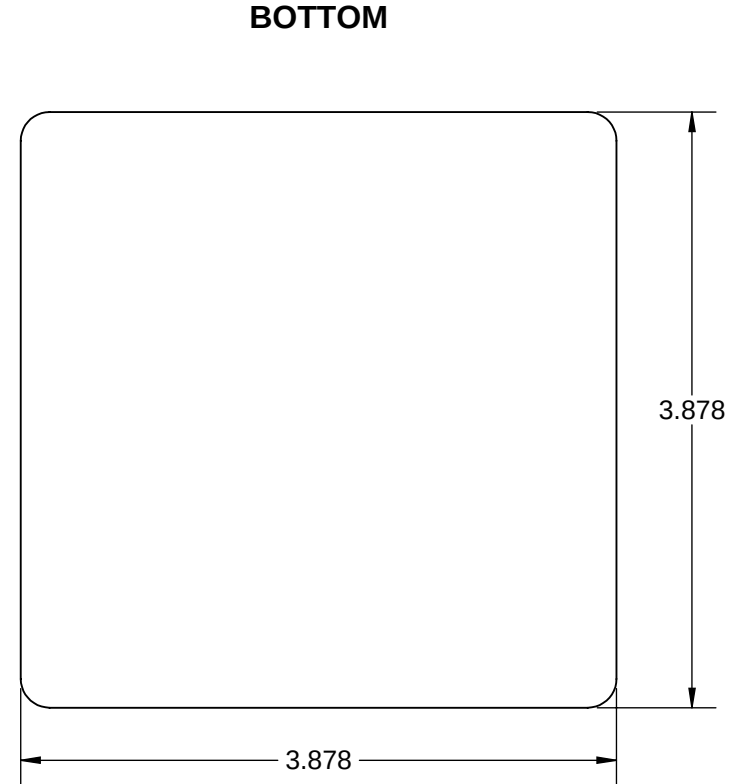
*NOTE: CONTACT TOPLINE FOR OTHER SHIM.

			
TITLE C7-PLANAR-624-A CCGA LAPPING HOLDER			
SCALE NONE	SIZE A	DRAWING NO. 700258	REV A
DO NOT SCALE DRAWING			SHEET 12 OF 13

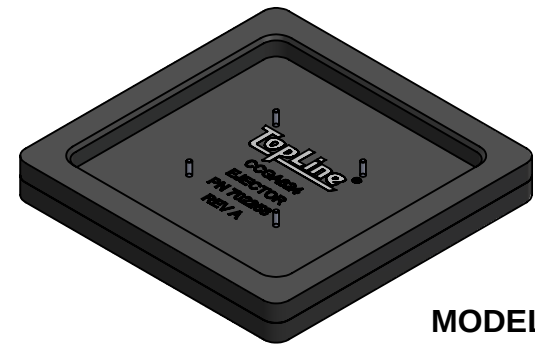
EJECTOR PLATE



SECTION A-A



DETAIL B



MODEL

NOTES:

- 1) DIMENSIONS INCHES [mm].
- 2) MATERIAL: ALUMINUM or FR4.

TopLine®			
TITLE C7-PLANAR-624-A CCGA LAPPING HOLDER			
SCALE 4:5	SIZE A	DRAWING NO. 700258	REV A
DO NOT SCALE DRAWING			SHEET 13 OF 13