

4

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PART NO.	APPLICABLE NOTE(S)	PLATING THICKNESS, μ IN	NO OF POSITIONS	CONFIGURATION
CGB4PS02VL0010	1	10	2	SHEET 1,2,3
CGB4PS02VL0030	1	30	2	SHEET 1,2,3
CGB4PS02VL0050	1	50	2	SHEET 1,2,3
CGB4PS04VL0010	1	10	4	SHEET 1,2,4
CGB4PS04VL0030	1	30	4	SHEET 1,2,4
CGB4PS04VL0050	1	50	4	SHEET 1,2,4
CGB4PS06VL0010	1	10	6	SHEET 1,2,5
CGB4PS06VL0030	1	30	6	SHEET 1,2,5
CGB4PS06VL0050	1	50	6	SHEET 1,2,5
CGB4PS08VL0010	1	10	8	SHEET 1,2,6
CGB4PS08VL0030	1	30	8	SHEET 1,2,6
CGB4PS08VL0050	1	50	8	SHEET 1,2,6
CGB4PS10VL0010	1	10	10	SHEET 1,2,7
CGB4PS10VL0030	1	30	10	SHEET 1,2,7
CGB4PS10VL0050	1	50	10	SHEET 1,2,7



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	ECO 30958 (FOOTPRINT UPDATE)	06/03/16	PV
C	ECO 31523 (ADD TIN-DIP NOTES)	11/07/16	DKN
D	ECO 32966 (UPDATE SPEC)	10/10/17	DKN
E	UPDATED PCB TRACE	3/26/2019	PV
F	UPDATED PCB DEFINITION	9/24/2019	PV

NOTE(S) :

1 SCREWS TO BE PACKAGED AND SHIPPED UNASSEMBLED.

MATERIAL:	ELECTRICAL:	MECHANICAL:	ENVIRONMENTAL:
Housing Brass Alloy per ASTM B-16 Center-conductor BeCu Alloy per ASTM B-196 Insulator PEEK 1000 Hardware: 18-8 and 303 SST	Impedance: 50 Ohms Nom. Frequency Range: DC TO 40 GHz VSWR: 1.15:1 DC to 26 GHz 1.25:1 26 to 40 GHz Insertion Loss: 0.12 x SQRT(f(GHz)) Insulation Resistance: >= 5 GigaOhms Contact Resistance: Center: <= 6 MilliOhms Outer: <= 2 MilliOhms Working Voltage: 325 Vrms @ Sea Level 125 Vrms @ 70000 feet Dielectric Withstand Voltage: 500 Vrms min	Interface Dimensions: SMPM PER MIL-STD-348 Connector Durability: 1000 Cycles Force to Engage (individual SB): Smooth Bore: 0.50 lbs nom Force to Disengage (individual SB): Smooth Bore: 0.50 lbs nom Center Contact Retention: NA	Temperature Cycling: MIL-STD-202, Method 107, Cond B, -65°C to +165°C, 5 cycles Moisture Resistance: MIL-STD-202, Method 103, Test Cond. B Vibration: MIL-STD-202, Method 204, Test Cond. A Shock: MIL-STD-202, Method 213, Test Cond. I, except 10g peak Corrosion: MIL-STD-202, Method 101, Test Cond. B

FINISH:
Housing and Center Conductor Gold plate per ASTM B-488, over Nickel underplate per SAE-AMS-QQ-N-290

APPLICABLE CARLISLE IT DOCUMENTS		
WORK STANDARD	PROD INSTRUC	ASSY INSTRUC
NA	NA	NA

TOLERANCES AND NOTES
EXCEPT AS NOTED DIMENSIONS ARE IN INCHES. LINEAR: XX ±.015 ANGULAR: ± 1/2° FRACTION: ± 1/32
1. MACHINE FINISH: \sqrt{RMS}
2. BREAK ALL SHARP EDGES .003 MAX.
3. MACHINED FILLETS, .005 MAX.
4. MACHINED SURFACES SQUARE TO RESPECTIVE AXIS WITHIN .005 INCHES PER INCH.
5. MACHINED DIAMETERS CONCENTRIC WITHIN .002 I.D.
6. DIMENSIONS TO BE MET BEFORE PLATING.
7. CHAMFER ALL THREADS 45°.
8. THREADS PER H-28
9. REMOVE FRAYED EDGES ON TEFLON.
10. REMOVE ALL BURRS.

MATERIAL		DATE	
APPROVAL	INITIALS	01.29.16	
DRAWN BY	P.V.		
CHECKED BY	-		
TEST ENGR	-		
QUALITY	-		
DESIGN ENG	P.V.	02.12.16	
MFG. ENGR	-		
ECO APPRV	PV	10.11.17	

SPECIFICATION		PROCUREMENT	
CARLISLE Interconnect Technologies Cerritos, CA 90703		TITLE SSMP CONNECTOR, MALE, PCB, VERTICAL MOUNT	
SCALE 1:1	SUB-DIRECTORY/ OUTLINE	SHEET 1 OF 7	REV. 7
SIZE CAGE CODE 30990	DRAWING NO. CGB4PSXXVL00XX		

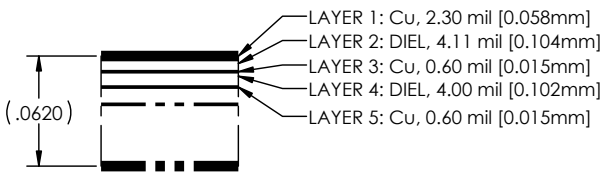
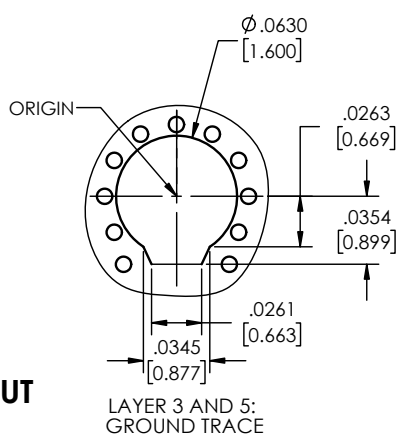
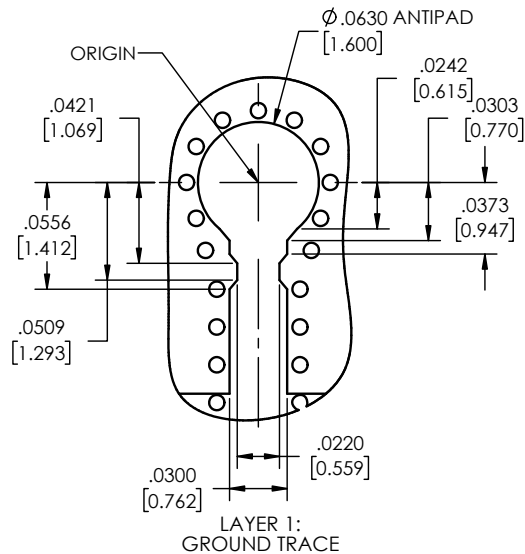
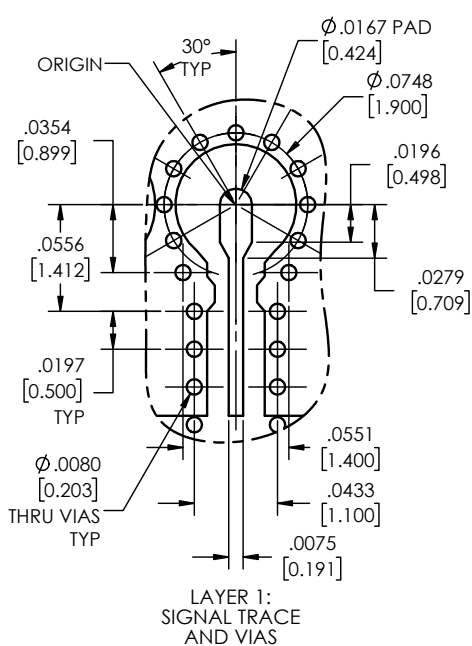
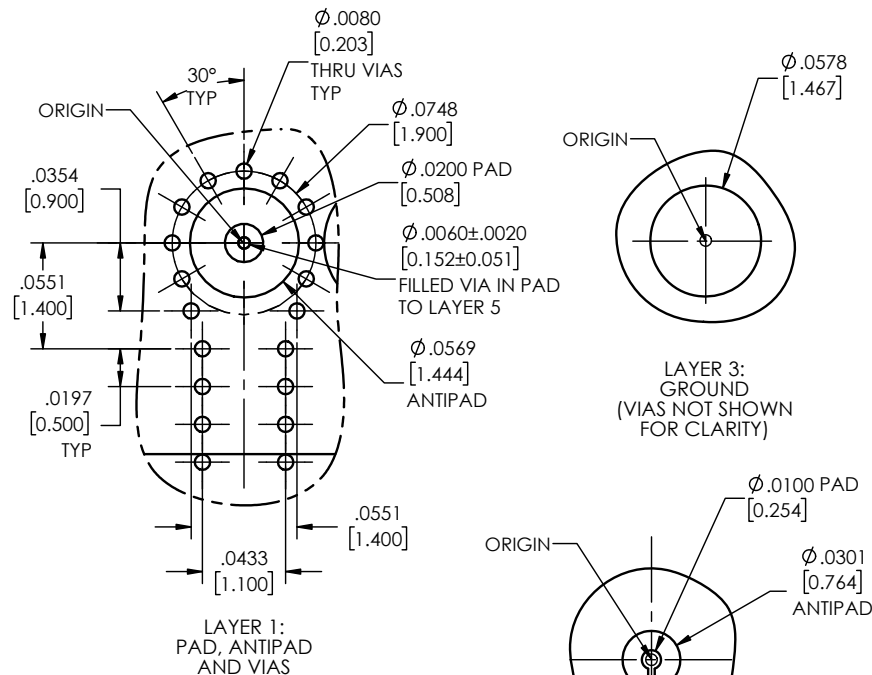
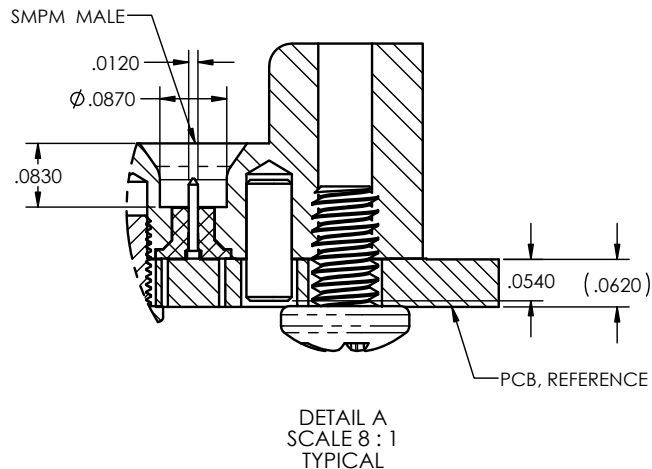
SSMP® is a registered trademark of Carlisle IT.

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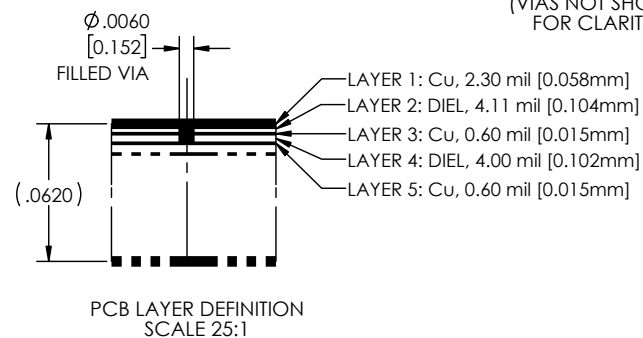
2

1



- LAYER 1: Cu, 2.30 mil [0.058mm]
- LAYER 2: DIELECTRIC, 4.11 mil [0.104mm]
- LAYER 3: Cu, 0.60 mil [0.015mm]
- LAYER 4: DIELECTRIC, 4.00 mil [0.102mm]
- LAYER 5: Cu, 0.60 mil [0.015mm]

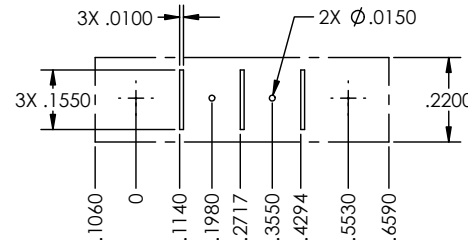
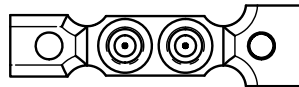
DETAIL C
CPW PCB LAYOUT
 SCALE 20:1



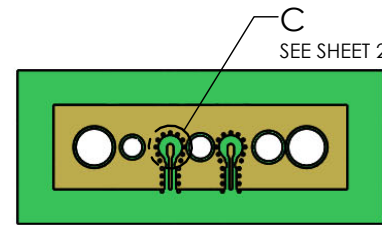
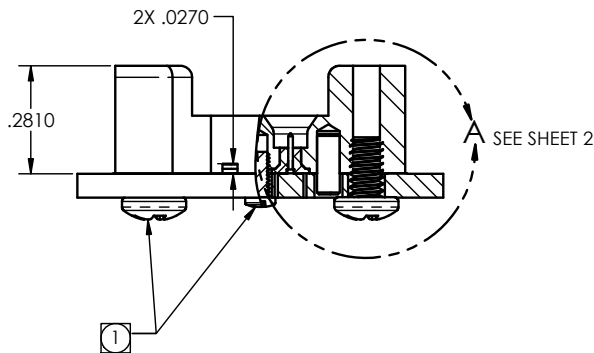
- FILLED VIA Ø.0060 [0.152]
- LAYER 1: Cu, 2.30 mil [0.058mm]
- LAYER 2: DIELECTRIC, 4.11 mil [0.104mm]
- LAYER 3: Cu, 0.60 mil [0.015mm]
- LAYER 4: DIELECTRIC, 4.00 mil [0.102mm]
- LAYER 5: Cu, 0.60 mil [0.015mm]

DETAIL B
STRIPLINE PCB LAYOUT
 SCALE 20:1

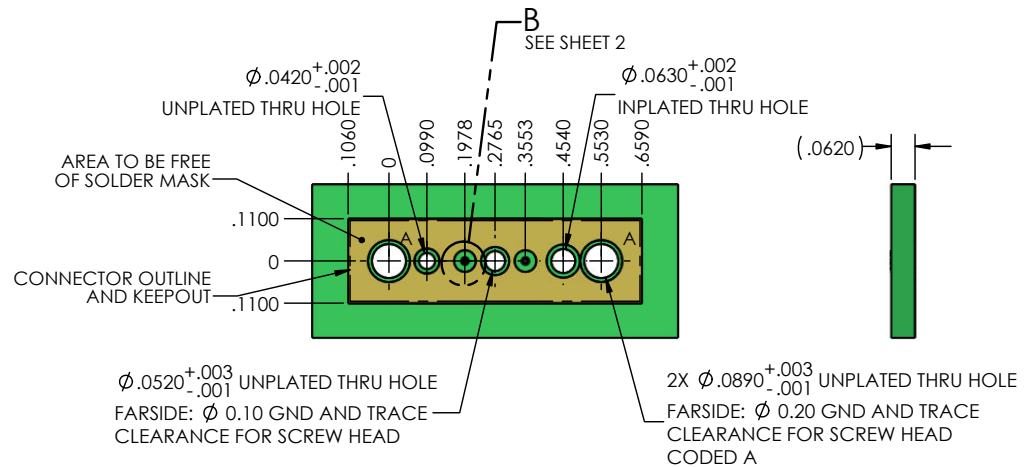
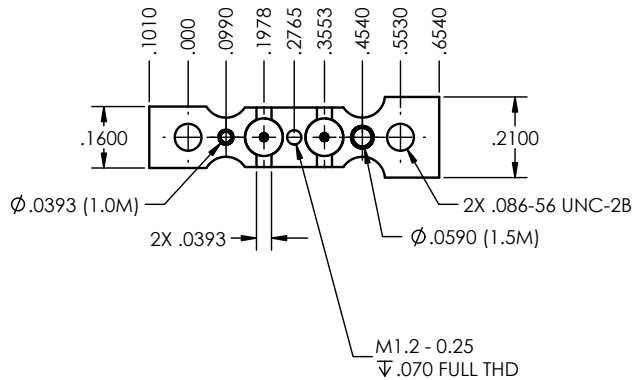
SCALE	SUB-DIRECTORY/ OUTLINE	SHEET 2 OF 7
1:1		
SIZE	CAGE CODE	DRAWING NO.
C	30990	CGB4PSXXVL00XX
		REV. F



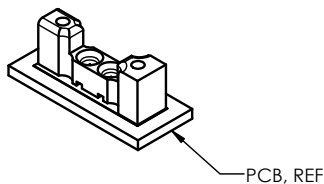
FOOTPRINT STENCIL
SCALE 4:1



CPW PCB SHOWN

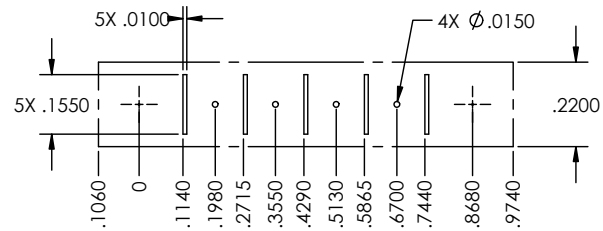
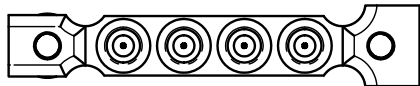


STRIPLINE PCB SHOWN
RECOMMENDED HOLE PATTERN
AND SOLDER MASK APPLIES TO
BOTH STRIPLINE AND CPW PCB'S
SEE SHEET 2 FOR SIGNAL TRACE



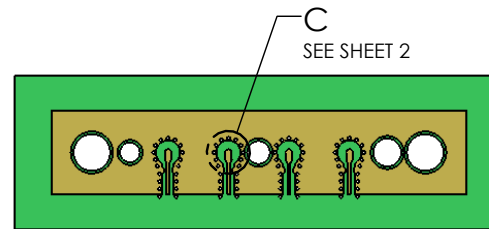
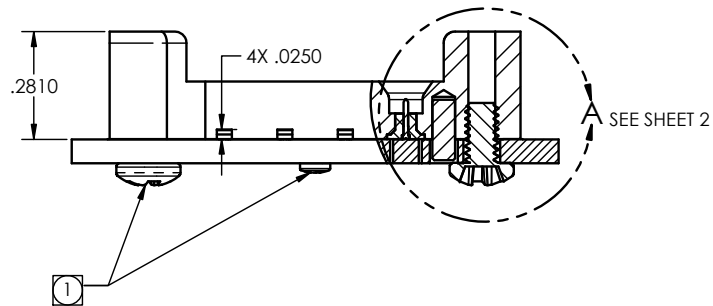
CGB4PS02VL00XX
2 POSITION

SCALE	SUB-DIRECTORY/ OUTLINE\	SHEET 3 OF 7
1:1		
SIZE	CAGE CODE	DRAWING NO.
C	30990	CGB4PSXXVL00XX
		REV.
		F

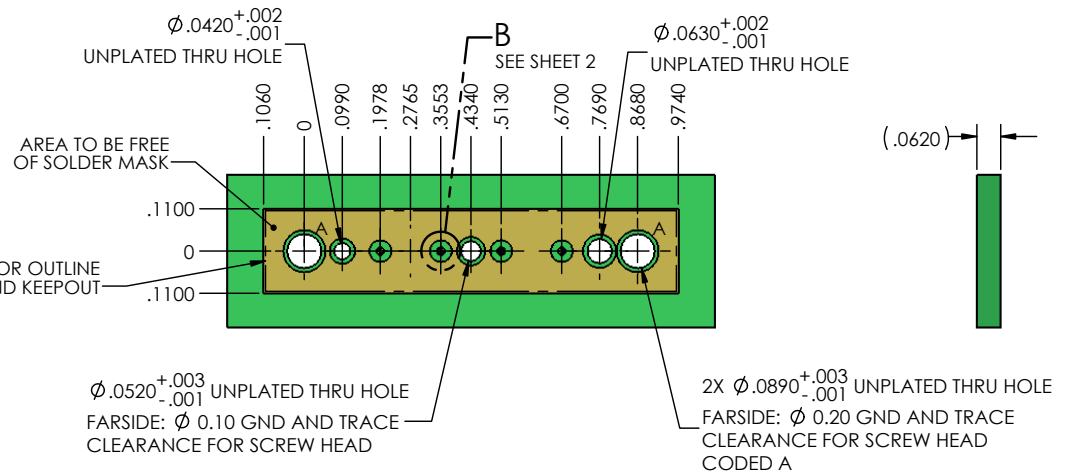
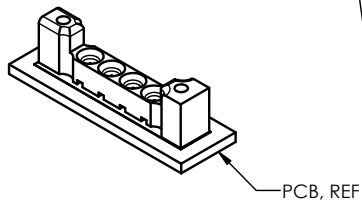
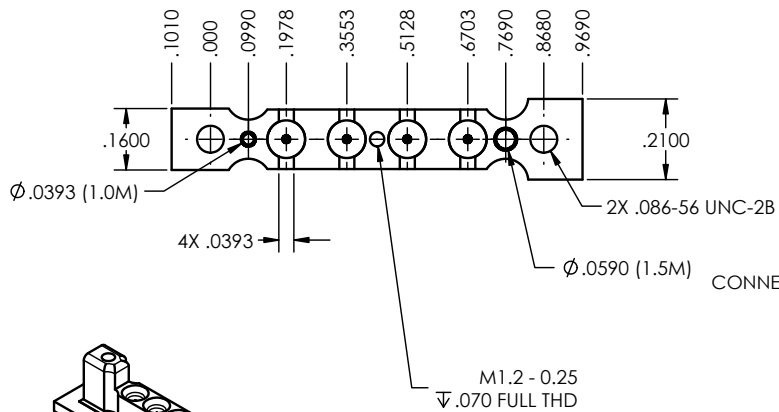


FOOTPRINT STENCIL

SCALE 4:1



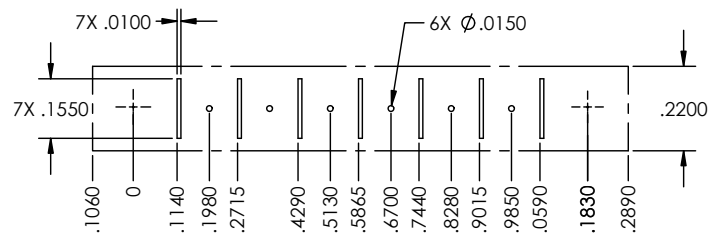
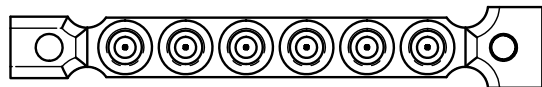
CPW PCB SHOWN



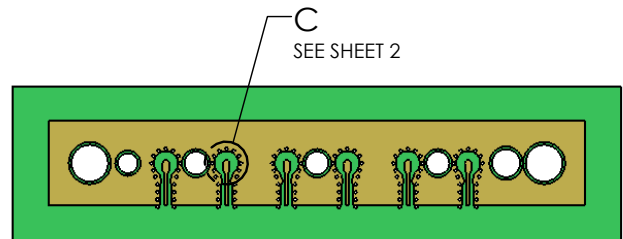
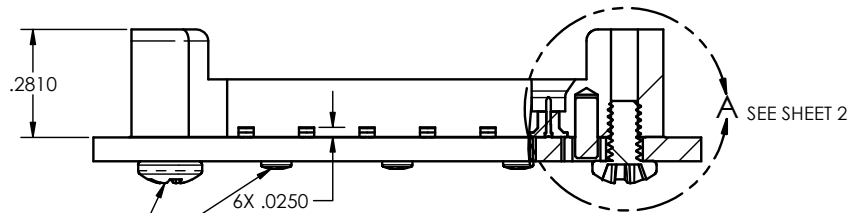
**STRIPLINE PCB SHOWN
RECOMMENDED HOLE PATTERN
AND SOLDER MASK APPLIES TO
BOTH STRIPLINE AND CPW PCB'S
SEE SHEET 2 FOR SIGNAL TRACE**

**CGB4PS04VL00XX
4 POSITION**

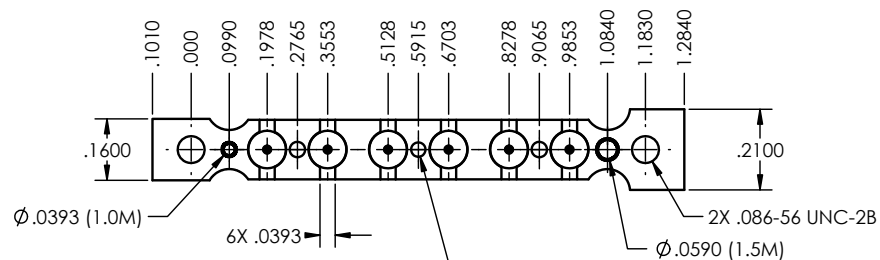
SCALE	SUB-DIRECTORY/ OUTLINE	SHEET 4 OF 7
1:1		
SIZE	CAGE CODE	DRAWING NO.
C	30990	CGB4PSXXVL00XX
		REV.
		F



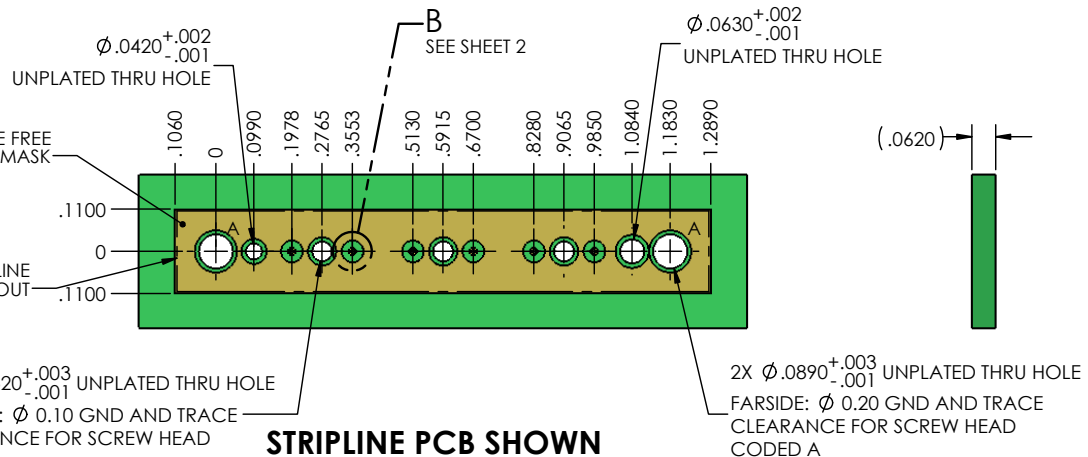
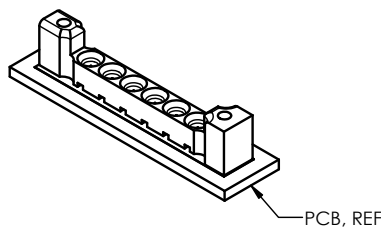
FOOTPRINT STENCIL
SCALE 4:1



CPW PCB SHOWN



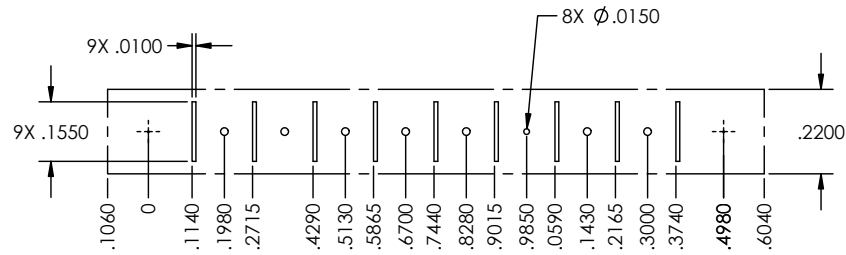
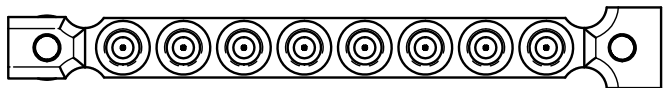
M1.2 - 0.25
∇.070 FULL THD



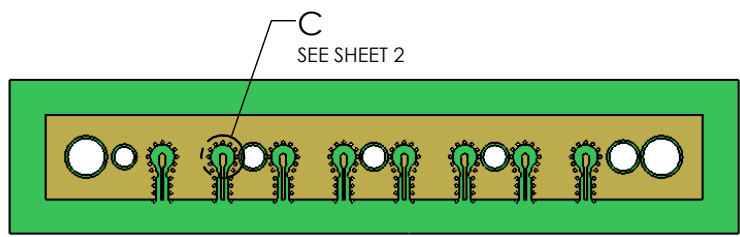
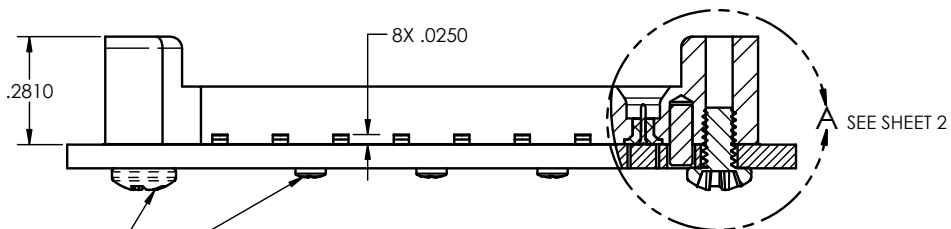
STRIPLINE PCB SHOWN
RECOMMENDED HOLE PATTERN AND SOLDER MASK APPLIES TO BOTH STRIPLINE AND CPW PCB'S
SEE SHEET 2 FOR SIGNAL TRACE

CGB4PS06VL00XX
6 POSITION

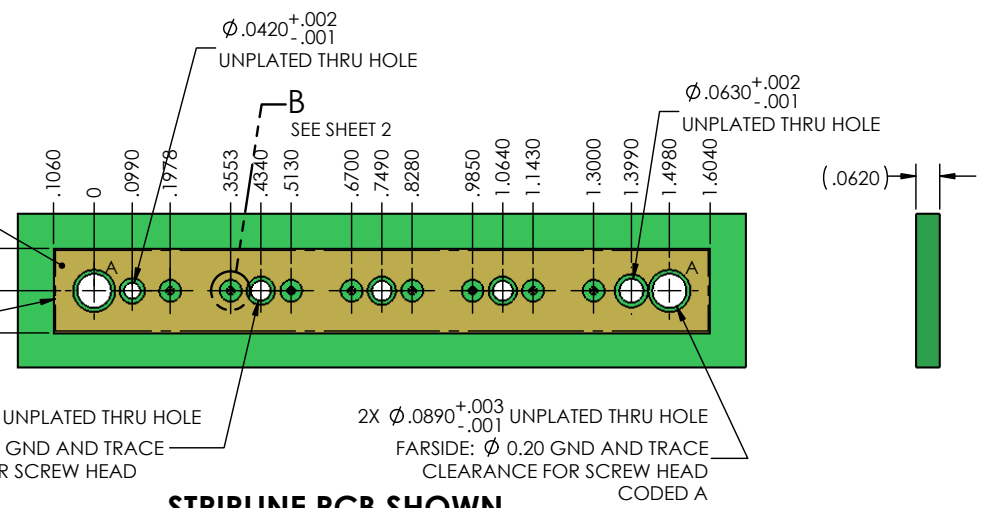
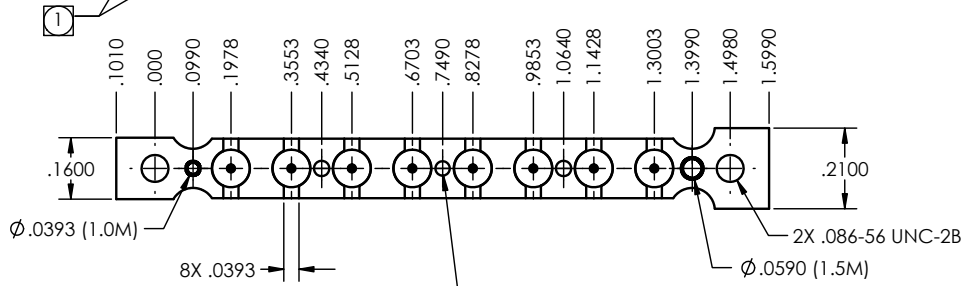
SCALE	SUB-DIRECTORY/ OUTLINE\	SHEET 5 OF 7
1:1		
SIZE	CAGE CODE	DRAWING NO.
C	30990	CGB4PSXXVL00XX
		REV. F



FOOTPRINT STENCIL
SCALE 4:1



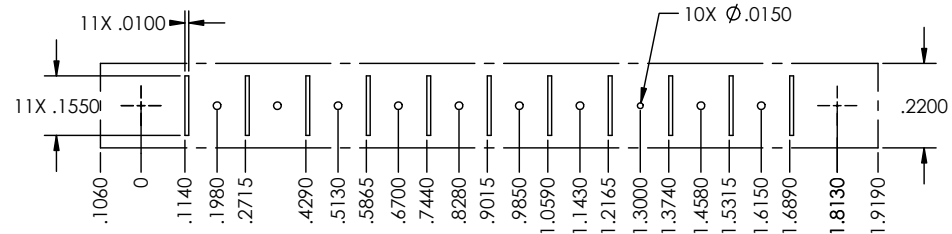
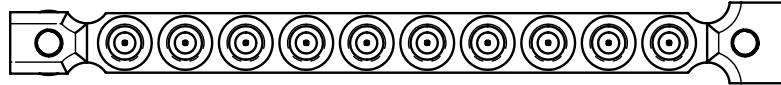
CPW PCB SHOWN



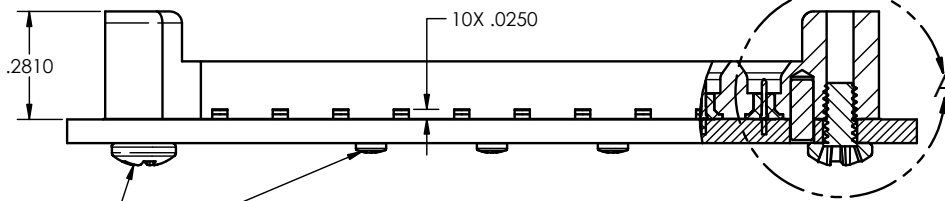
STRIPLINE PCB SHOWN
RECOMMENDED HOLE PATTERN
AND SOLDER MASK APPLIES TO
BOTH STRIPLINE AND CPW PCB'S
SEE SHEET 2 FOR SIGNAL TRACE

CGB4PS08VL00XX
8 POSITION

SCALE	SUB-DIRECTORY/ OUTLINE\	SHEET 6 OF 7
1:1		
SIZE	CAGE CODE	DRAWING NO.
C	30990	CGB4PSXXVL00XX
		REV. F

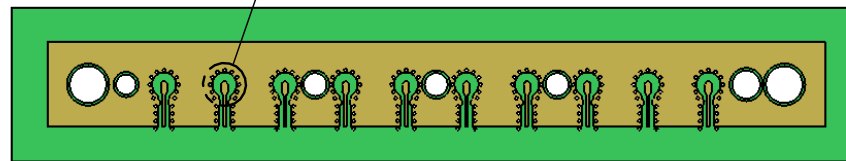


FOOTPRINT STENCIL
SCALE 4:1

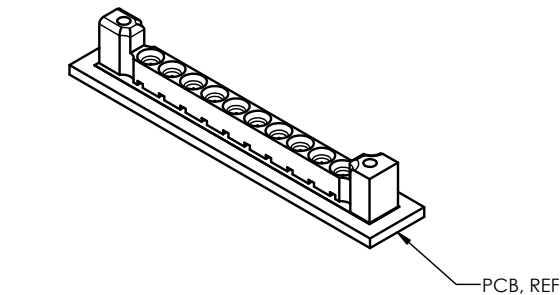
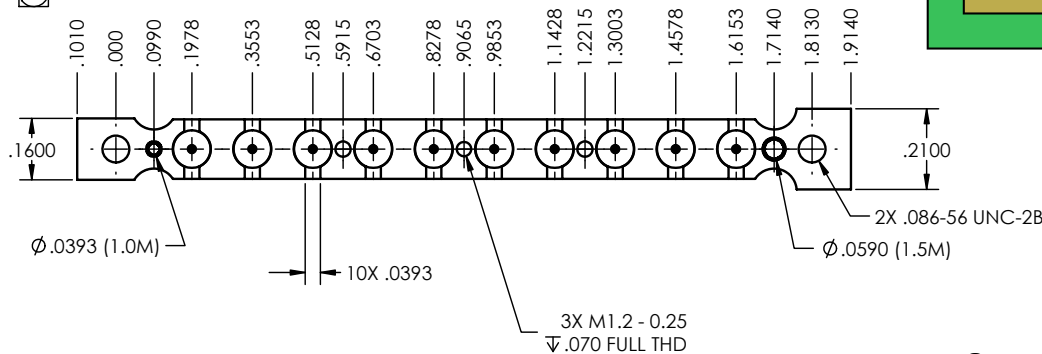


SEE SHEET 2

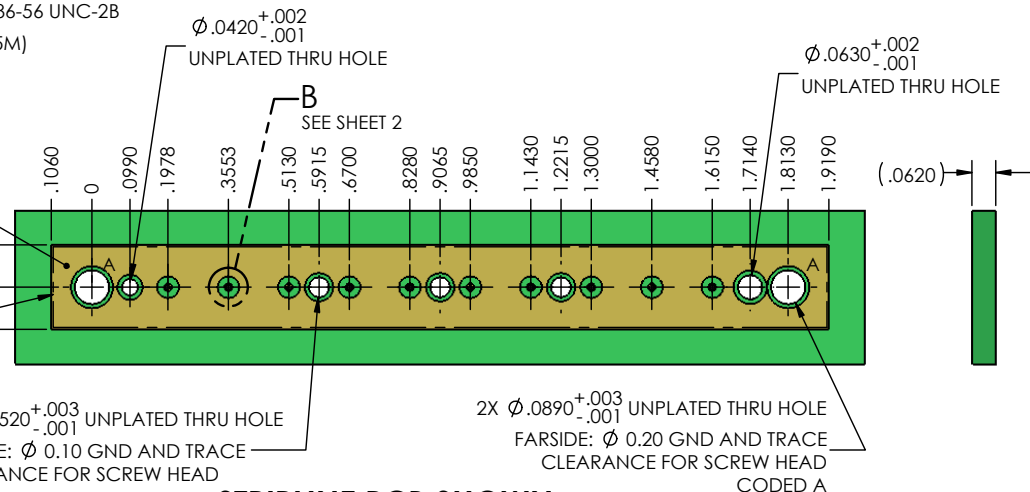
C
SEE SHEET 2



CPW PCB SHOWN



AREA TO BE FREE OF SOLDER MASK
CONNECTOR OUTLINE AND KEEPOUT



3X Ø.0520^{+.003}_{-.001} UNPLATED THRU HOLE
FARSIDE: Ø.020 GND AND TRACE CLEARANCE FOR SCREW HEAD

2X Ø.0890^{+.003}_{-.001} UNPLATED THRU HOLE
FARSIDE: Ø.020 GND AND TRACE CLEARANCE FOR SCREW HEAD
CODED A

STRIPLINE PCB SHOWN
RECOMMENDED HOLE PATTERN AND SOLDER MASK APPLIES TO BOTH STRIPLINE AND CPW PCB'S
SEE SHEET 2 FOR SIGNAL TRACE

CGB4PS10VL00XX
10 POSITION

SCALE	SUB-DIRECTORY/ OUTLINE	SHEET 7 OF 7
1:1		
SIZE	CAGE CODE	DRAWING NO.
C	30990	CGB4PSXXVL00XX
		REV. F