

4

3

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1

| 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 |
| - | ECO 29898 (INITIAL RELEASE) | 01/29/2016 | P.V. |
| A | ECO 30026 | 2/11/2016 | P.V. |
| B | ECO XXXXX (FOOTPRINT UPDATE) | 06/03/16 | PV |

MATERIAL:
Housing
Brass Alloy per ASTM B-16
Center-conductor
BeCu Alloy per ASTM B-196
Insulator
PEEK 1000
Hardware:
18-8 and 303 SST

ELECTRICAL:
Impedance: 50 Ohms Nom.
Frequency Range: DC TO 40 GHz
VSWR: 1.15:1 to 26 GHz
1.25:1 to 40 GHz
Insertion Loss: $0.12 \times \text{SQRT}(f(\text{GHz}))$
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

MECHANICAL:
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

ENVIRONMENTAL:
Temperature Cycling:
MIL-STD-202, Method 107, Cond B, -65°C to $+165^{\circ}\text{C}$, 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: $XX \pm .015$ | ANGULAR $\pm 1/2^{\circ}$ |
| FRACTION $\pm 1/32$ | |
| 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 TLR. | |
| 6. DIMENSIONS TO BE MET BEFORE PLATING. | |
| 7. CHAMFER ALL THREADS 45°. | |
| 8. THREADS PER H-28 | |
| 9. REMOVE FRAVED EDGES ON TEFLON. | |
| 10. REMOVE ALL BURRS. | |

| MATERIAL | | SPECIFICATION | | PROCUREMENT | |
|-------------------|----------|---|--|----------------|--|
| APPROVAL INITIALS | DATE | TITLE | | SHEET 1 OF 7 | |
| TEST ENGR | 01.29.16 | SSMP CONNECTOR, MALE, PCB, VERTICAL MOUNT | | 7 | |
| CHECKED BY | - | SCALE | | SUB-DIRECTORY/ | |
| DESIGN ENG | P.V. | 1:1 | | OUTLINE/ | |
| TEST ENGR | - | SIZE | | CAGE CODE | |
| DESIGN ENG | P.V. | C 30990 | | DRAWING NO. | |
| MFG ENGR | - | OL_CGB4PSXXVL00XX | | REV. | |
| ECO APPRV | - | B | | 7 | |

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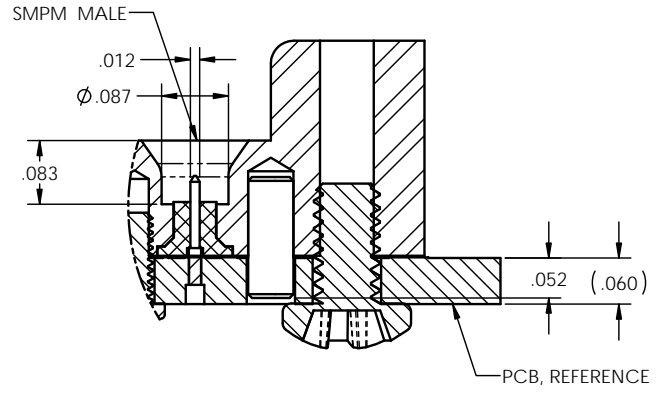
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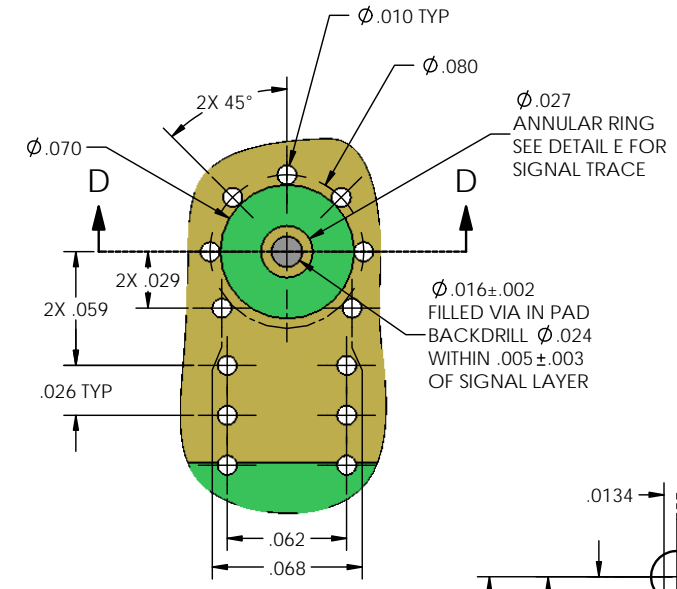
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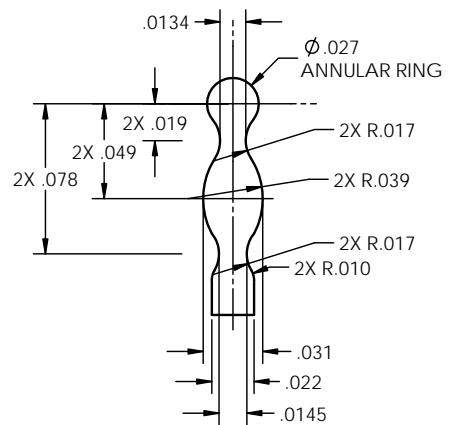
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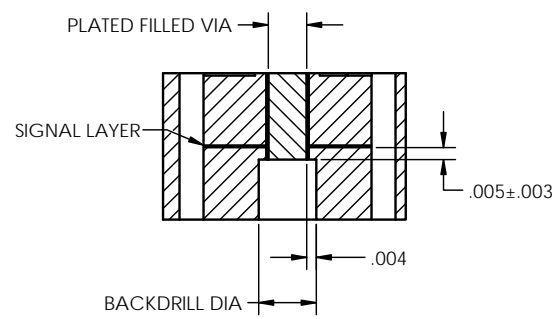
DETAIL A
SCALE 8 : 1
TYPICAL



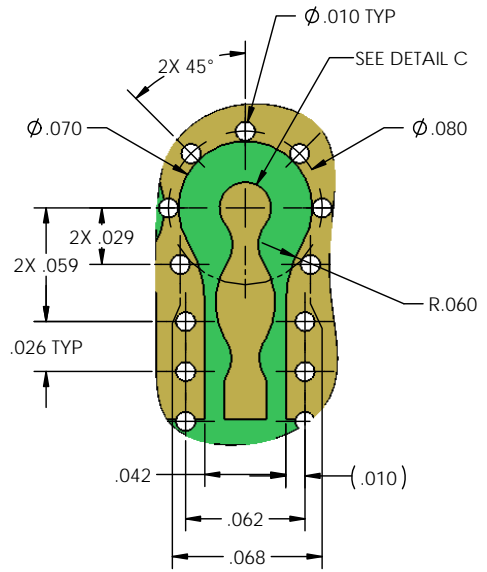
DETAIL B
STRIPLINE
SCALE 20:1



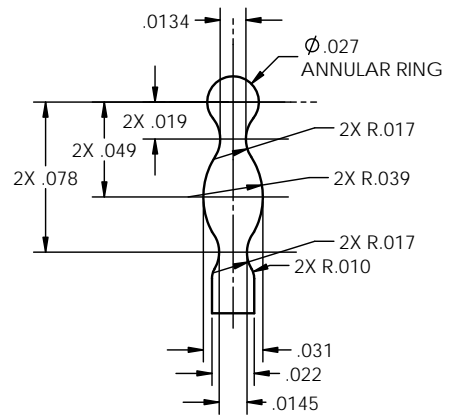
DETAIL E
TRACE ON
SIGNAL LAYER



SECTION D-D
SCALE 25 : 1



DETAIL B
CPW
SCALE 20:1

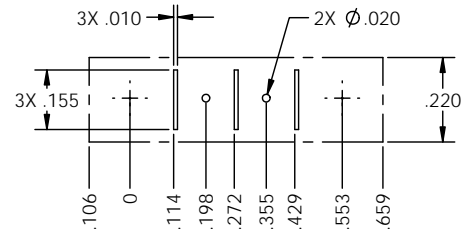
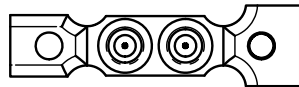


DETAIL C
SIGNAL TRACE

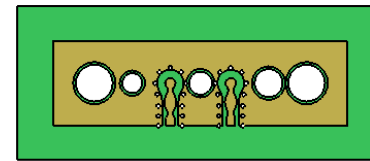
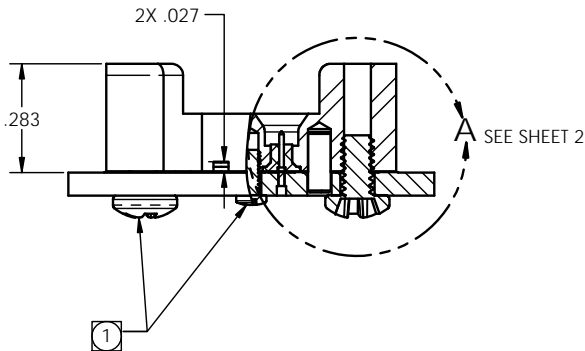
RECOMMENDED
CPW PCB PIN
LAYOUT

RECOMMENDED
STRIPLINE PCB PIN
LAYOUT

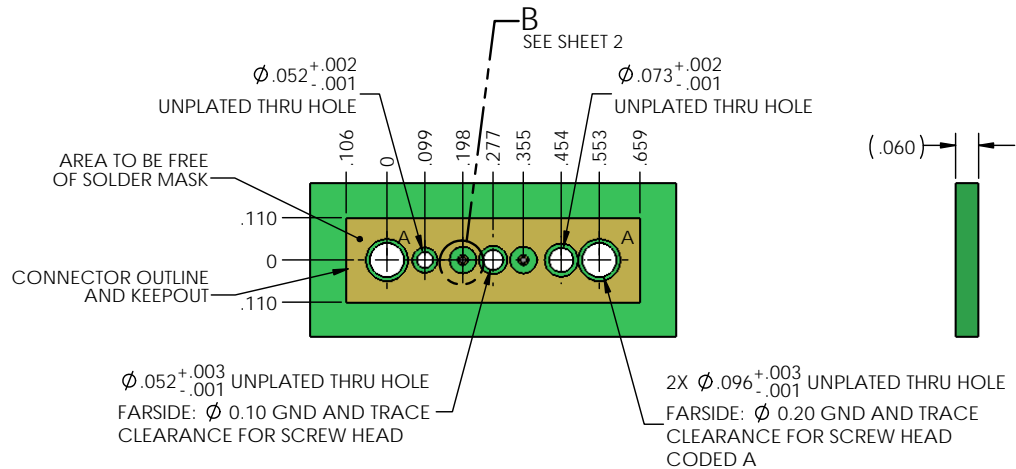
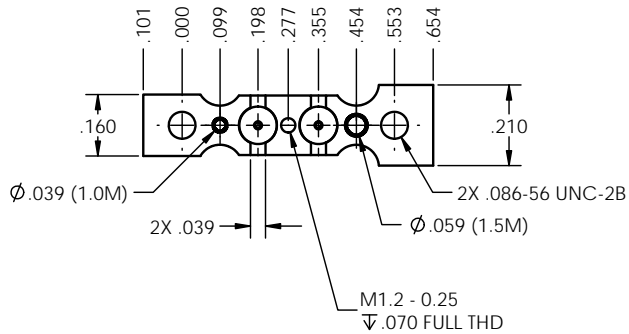
| | | |
|-------|----------------|-------------------|
| SCALE | SUB-DIRECTORY/ | SHEET 2 OF 7 |
| 1:1 | XXXX/ | |
| SIZE | CAGE CODE | DRAWING NO. |
| C | 30990 | OL_CGB4PSXXVL00XX |
| | | REV. B |



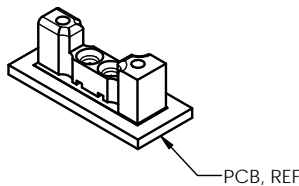
FOOTPRINT STENCIL
SCALE 4:1



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

NOTE(S) :
① SCREWS TO BE PACKAGED AND SHIPPED UNASSEMBLED.

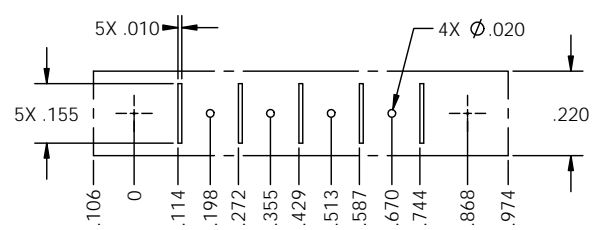
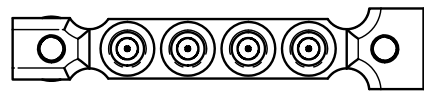
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|-------|----------------|-------------------|
| SCALE | SUB-DIRECTORY/ | SHEET 3 OF 7 |
| 1:1 | XXXX/ | |
| SIZE | CAGE CODE | DRAWING NO. |
| C | 30990 | OL_CGB4PSXXVL00XX |
| | | REV. |
| | | B |

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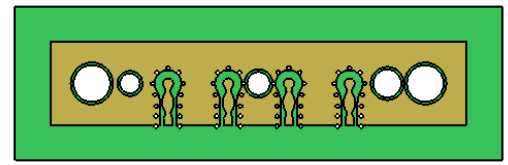
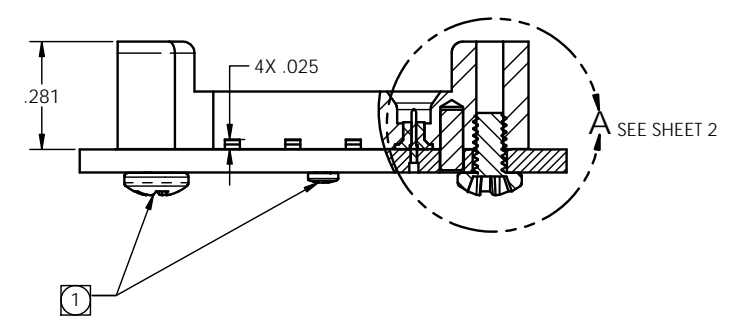
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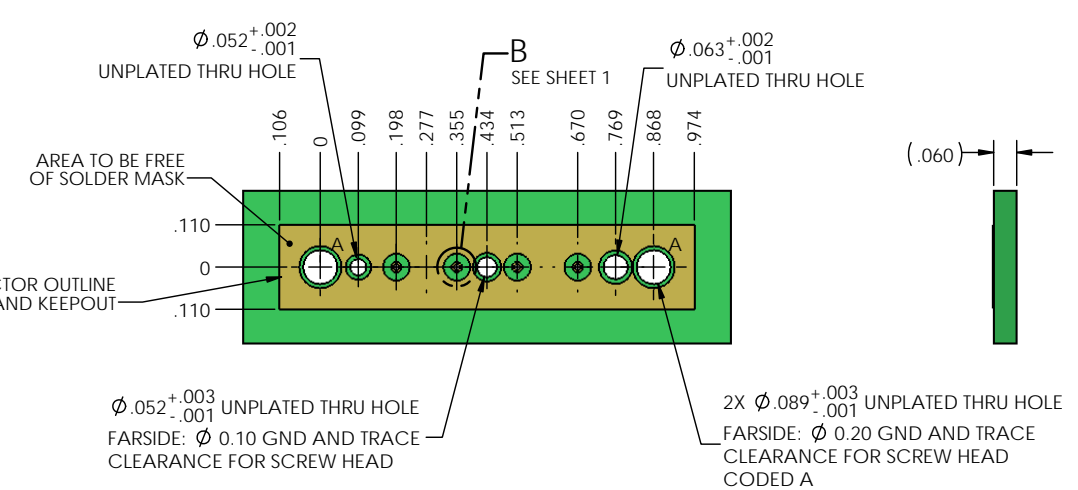
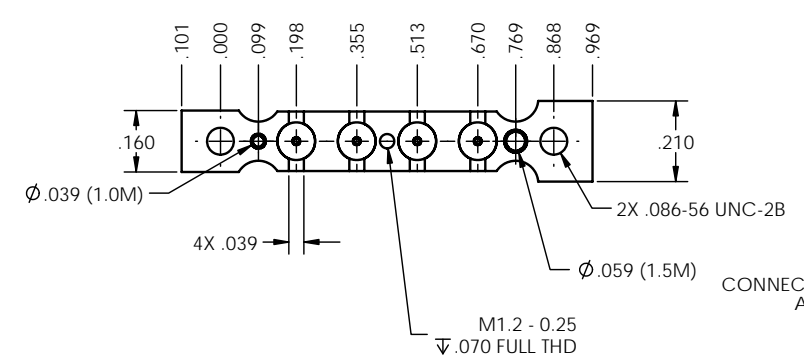
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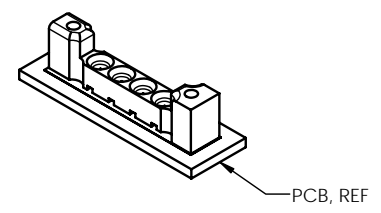
FOOTPRINT STENCIL
SCALE 4:1



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



NOTE(S) :
① SCREWS TO BE PACKAGED AND SHIPPED UNASSEMBLED.

CGB4PS04VL00XX
4 POSITION

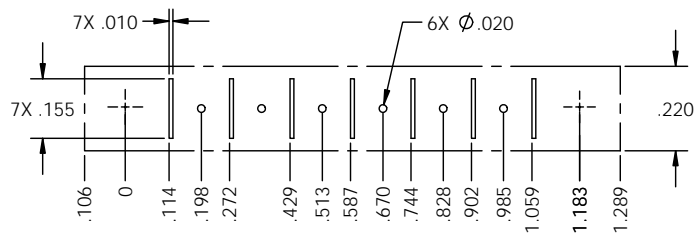
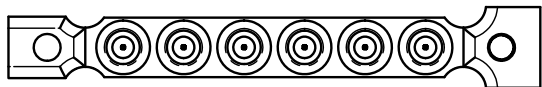
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|-------|----------------|-------------------|
| SCALE | SUB-DIRECTORY/ | SHEET 4 OF 7 |
| 1:1 | XXXX/ | |
| SIZE | CAGE CODE | DRAWING NO. |
| C | 30990 | OL_CGB4PSXXVL00XX |
| | | REV. B |

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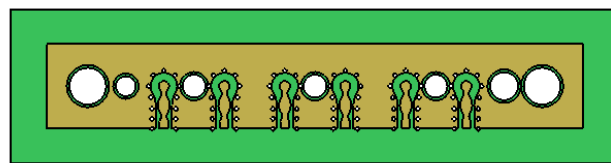
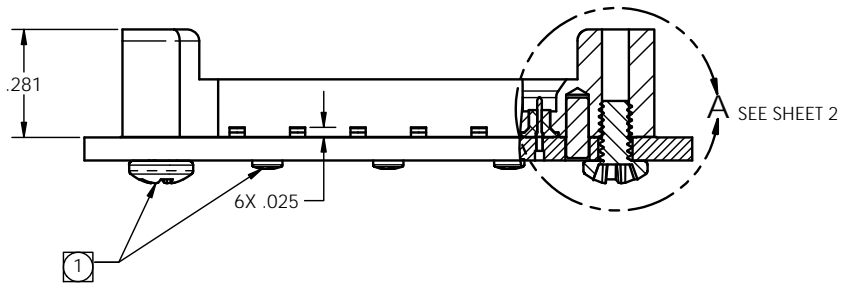
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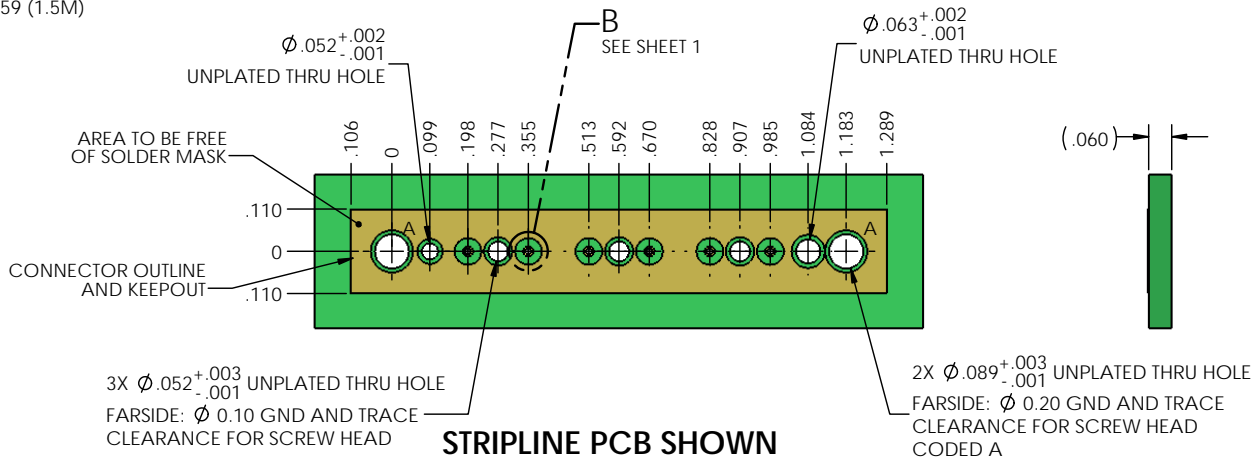
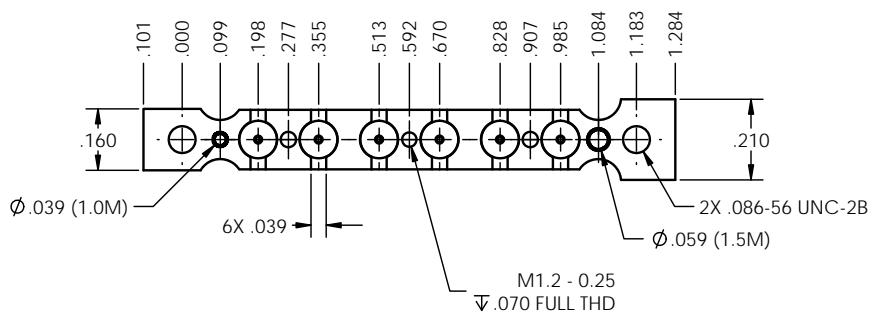
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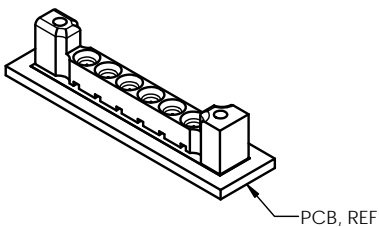
FOOTPRINT STENCIL
SCALE 4:1



CPW PCB SHOWN



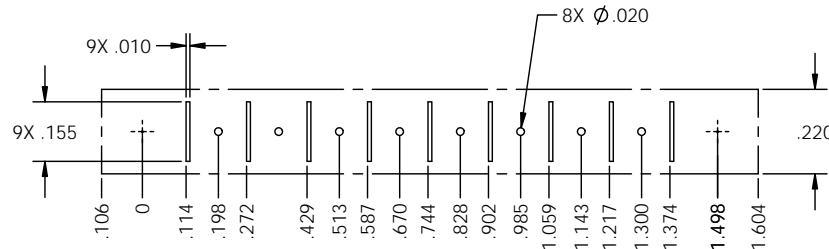
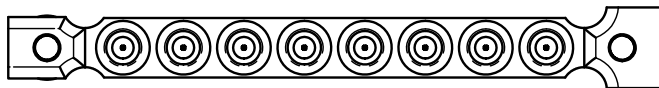
STRIPLINE PCB SHOWN
RECOMMENDED HOLE PATTERN AND SOLDER MASK APPLIES TO BOTH STRIPLINE AND CPW PCB'S
SEE SHEET 2 FOR SIGNAL TRACE



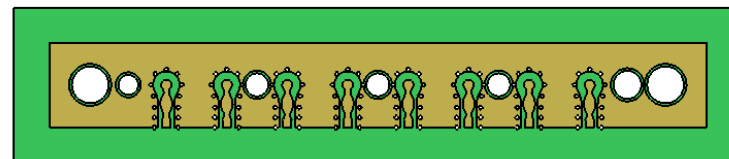
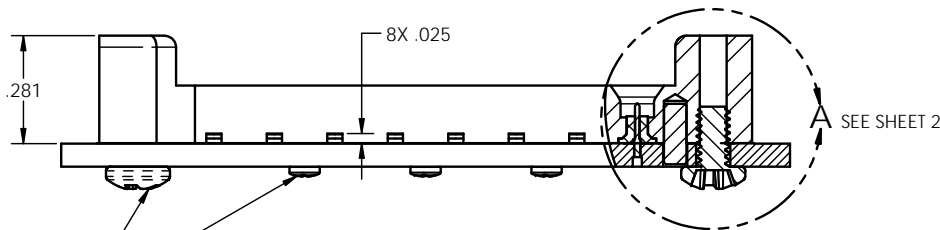
NOTE(S):
① SCREWS TO BE PACKAGED AND SHIPPED UNASSEMBLED.

CGB4PS06VL00XX
6 POSITION

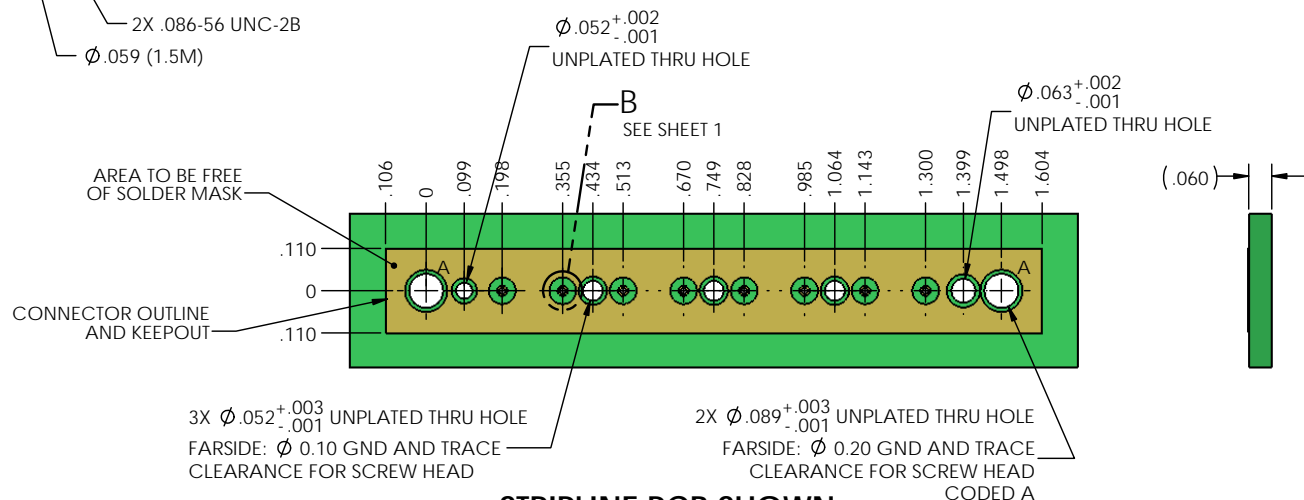
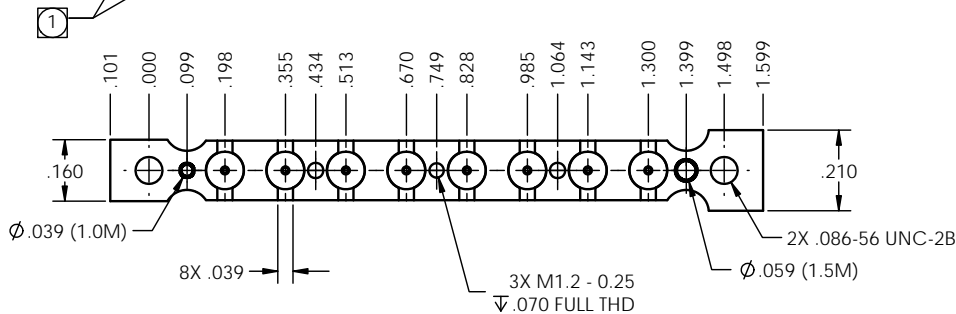
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|-------|----------------|-------------------|
| SCALE | SUB-DIRECTORY/ | SHEET 5 OF 7 |
| 1:1 | XXXX/ | |
| SIZE | CAGE CODE | DRAWING NO. |
| C | 30990 | OL_CGB4PSXXVL00XX |
| | | REV. B |



FOOTPRINT STENCIL
SCALE 4:1



CPW PCB SHOWN

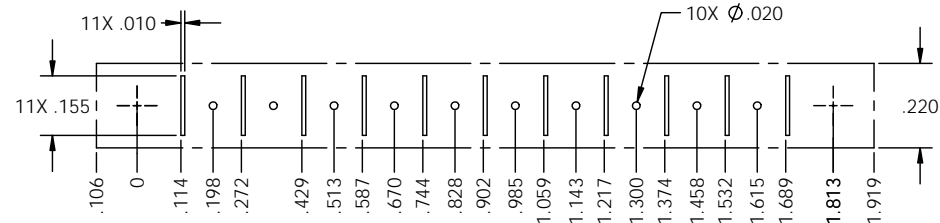
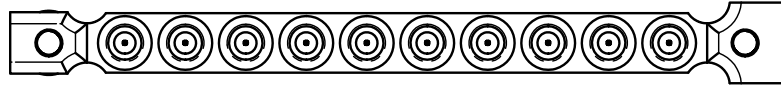


STRIPLINE PCB SHOWN
RECOMMENDED HOLE PATTERN
AND SOLDER MASK APPLIES TO
BOTH STRIPLINE AND CPW PCB'S
SEE SHEET 2 FOR SIGNAL TRACE

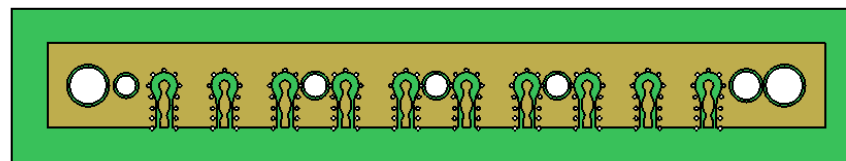
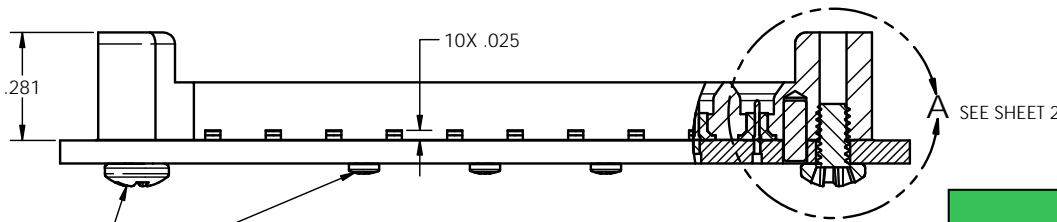
CGB4PS08VL00XX
8 POSITION

NOTE(S) :
① SCREWS TO BE PACKAGED AND SHIPPED UNASSEMBLED.

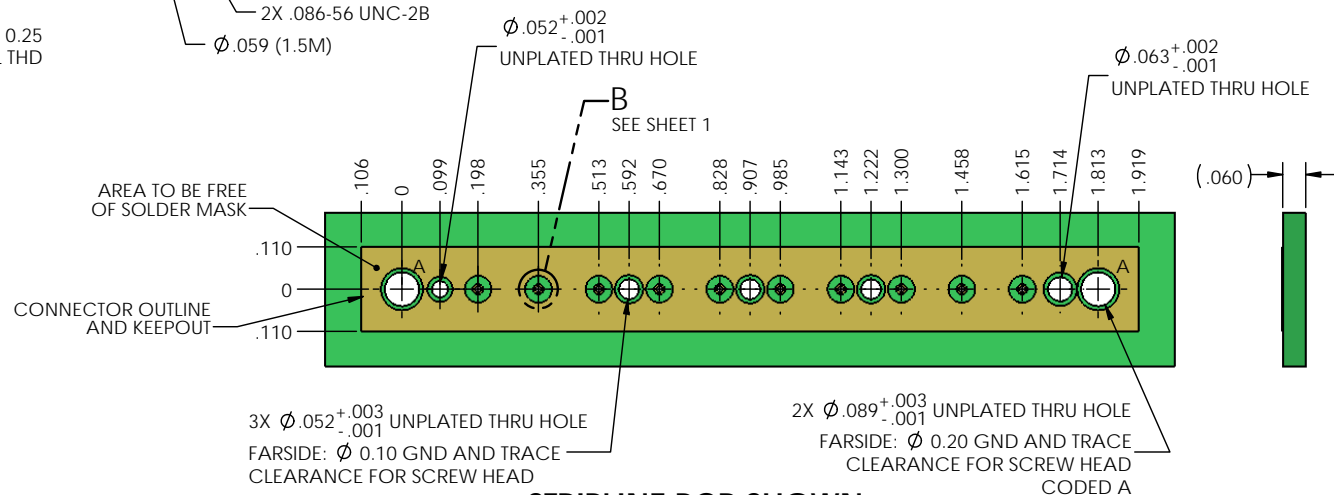
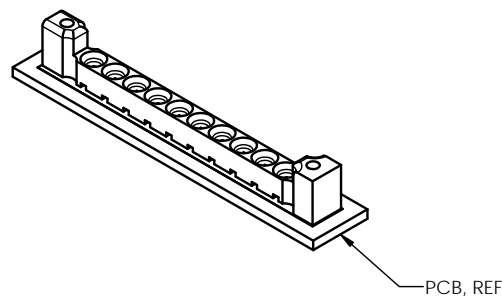
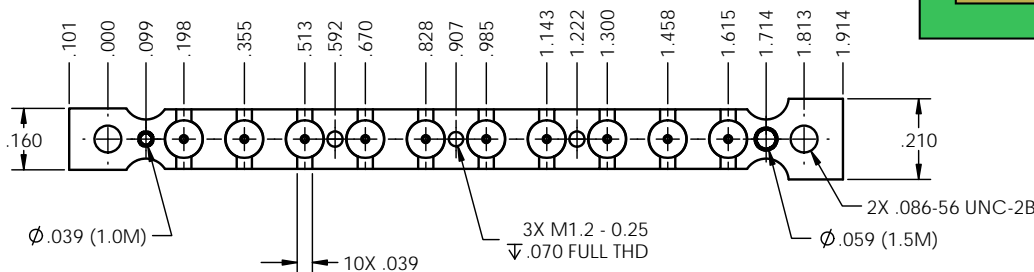
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|-------|----------------|-------------------|
| SCALE | SUB-DIRECTORY/ | SHEET 6 OF 7 |
| 1:1 | XXXXX/ | |
| SIZE | CAGE CODE | DRAWING NO. |
| C | 30990 | OL_CGB4PSXXVL00XX |
| | | REV. B |



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

CGB4PS10VL00XX
10 POSITION

NOTE(S):
 ① SCREWS TO BE PACKAGED AND SHIPPED UNASSEMBLED.

| | | |
|-------|----------------|-------------------|
| SCALE | SUB-DIRECTORY/ | SHEET 7 OF 7 |
| 1:1 | XXXX/ | |
| SIZE | CAGE CODE | DRAWING NO. |
| C | 30990 | OL_CGB4PSXXVL00XX |
| | | REV. B |