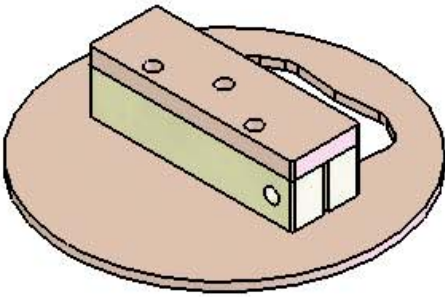
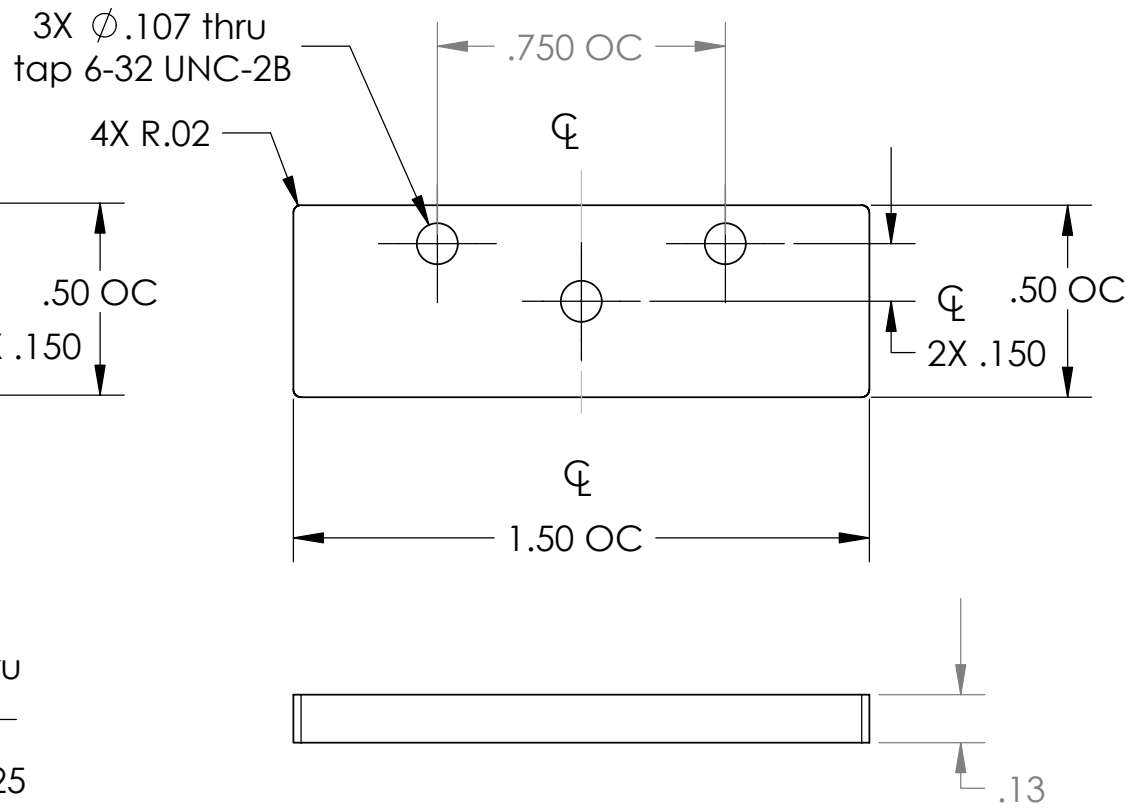
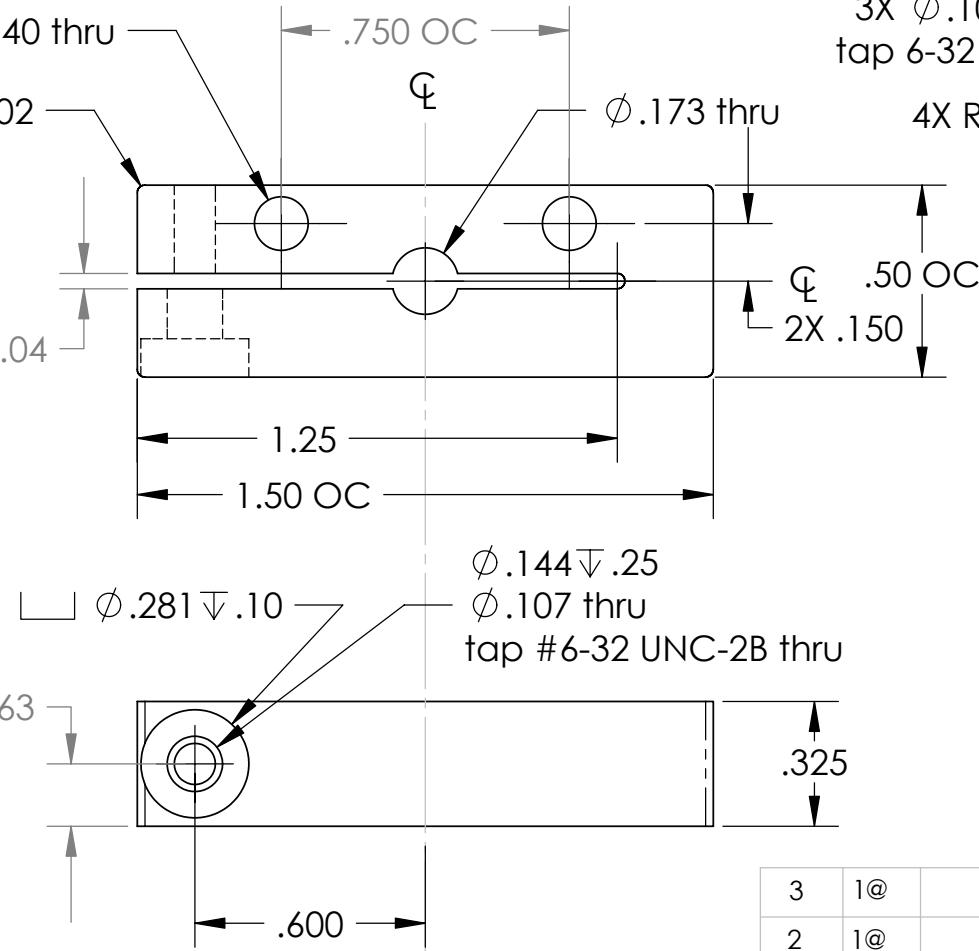
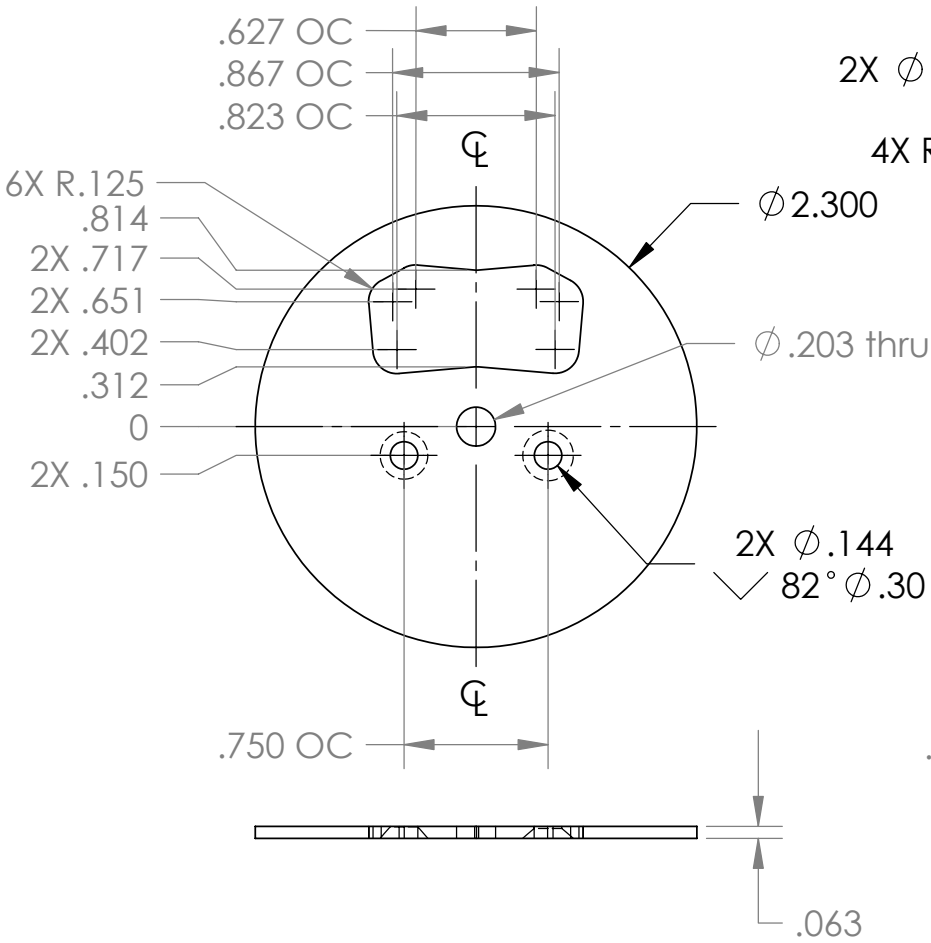
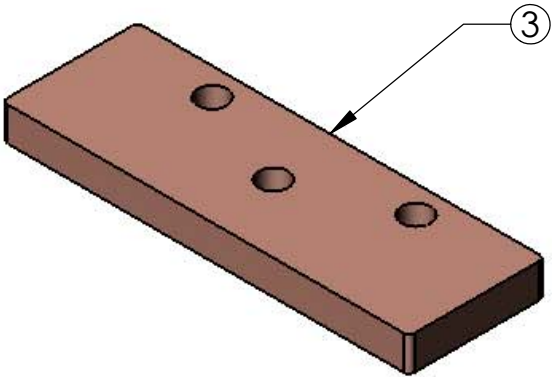
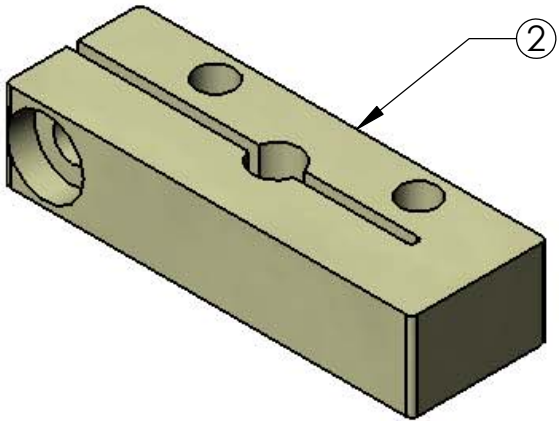
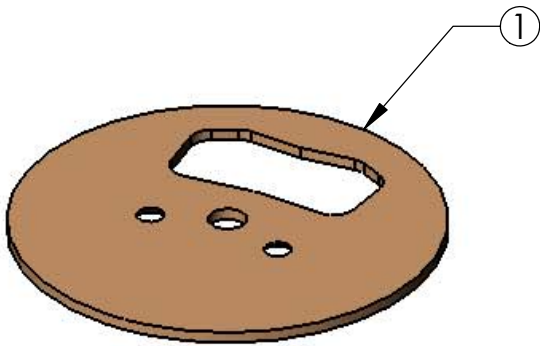


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| REVISIONS |                 |         |          |
|-----------|-----------------|---------|----------|
| REV.      | DESCRIPTION     | DATE    | APPROVED |
|           | INITIAL RELEASE | 6/26/06 | HWJ      |
|           |                 |         |          |



Assembly

|                       |                  |                                                                                                                                                                                                                                                                                                                                                 |                    |                          |                                                                                                                                                                                                                                                     |                        |                                |
|-----------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------|
| 3                     | 1@               |                                                                                                                                                                                                                                                                                                                                                 | Shutter calmp stop | Cu (.125 sheet)          |                                                                                                                                                                                                                                                     |                        |                                |
| 2                     | 1@               |                                                                                                                                                                                                                                                                                                                                                 | Shutter clamp      | Delrin                   |                                                                                                                                                                                                                                                     |                        |                                |
| 1                     | 1@               |                                                                                                                                                                                                                                                                                                                                                 | Shutter            | Cu (.0625 sheet)         |                                                                                                                                                                                                                                                     |                        |                                |
| Item No.              | Qty.             | Part No.                                                                                                                                                                                                                                                                                                                                        | Description        | Material Specification   |                                                                                                                                                                                                                                                     |                        |                                |
| BILL OF MATERIALS     |                  |                                                                                                                                                                                                                                                                                                                                                 |                    |                          |                                                                                                                                                                                                                                                     |                        |                                |
| Shop / Q.C.           |                  | UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:                                                                                                                                                                                                                                                                                                      |                    | APPROVALS DATE           | <b>Monterey Bay Aquarium Research Institute</b><br><b>MBARI</b><br><b>7700 Sandholdt RD.</b><br><b>Moss Landing, CA 95039</b><br><b>PH: (831) 775-1700</b><br> |                        |                                |
| Inspector             |                  | 1 PLACE DIM ±1/16                                                                                                                                                                                                                                                                                                                               | 2 PLACE DIM ±.02   | 3 PLACE DIM ±.005        |                                                                                                                                                                                                                                                     | ANGLES ±1°             | DRAWN<br>Hans Jannasch 7/25/06 |
| Shop Foreman          |                  | 1. DIMENSIONS ARE IN INCHES<br>2. DIMENSION LIMITS HELD AFTER PLATING.<br>3. REMOVE BURRS AND SHARP EDGES .015 MAX.<br>4. MACHINED FILLET RADII .0150-.030.<br>5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005<br>6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE. |                    |                          |                                                                                                                                                                                                                                                     | ENGINEER               |                                |
| Engineer              |                  |                                                                                                                                                                                                                                                                                                                                                 |                    |                          |                                                                                                                                                                                                                                                     | CHECKED Jon E. 7/31/06 |                                |
| NEXT ASSY Description | NEXT ASSY Number |                                                                                                                                                                                                                                                                                                                                                 |                    |                          |                                                                                                                                                                                                                                                     | PROJECT NO. 900606     |                                |
|                       |                  |                                                                                                                                                                                                                                                                                                                                                 |                    | PROJECT Chemical Sensors | 182jahaFluorShutter                                                                                                                                                                                                                                 |                        |                                |
| Application           |                  | DO NOT SCALE DRAWING                                                                                                                                                                                                                                                                                                                            |                    | WEIGHT                   | WETlabs Fluorometer Cu Shutter                                                                                                                                                                                                                      |                        |                                |
|                       |                  |                                                                                                                                                                                                                                                                                                                                                 |                    |                          | SIZE B DWG. NO. 182jaha.DWG                                                                                                                                                                                                                         | REV.                   |                                |
|                       |                  |                                                                                                                                                                                                                                                                                                                                                 |                    | SCALE 1:1                | CAD FILE: tornado/chem/SWfiles                                                                                                                                                                                                                      | SHEET 1 OF 1           |                                |
|                       |                  | 3                                                                                                                                                                                                                                                                                                                                               |                    | 2                        |                                                                                                                                                                                                                                                     | 1                      |                                |

**Monterey Bay Aquarium Research Institute**  
MBARI  
7700 Sandholdt RD.  
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WETlabs Fluorometer Cu Shutter

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