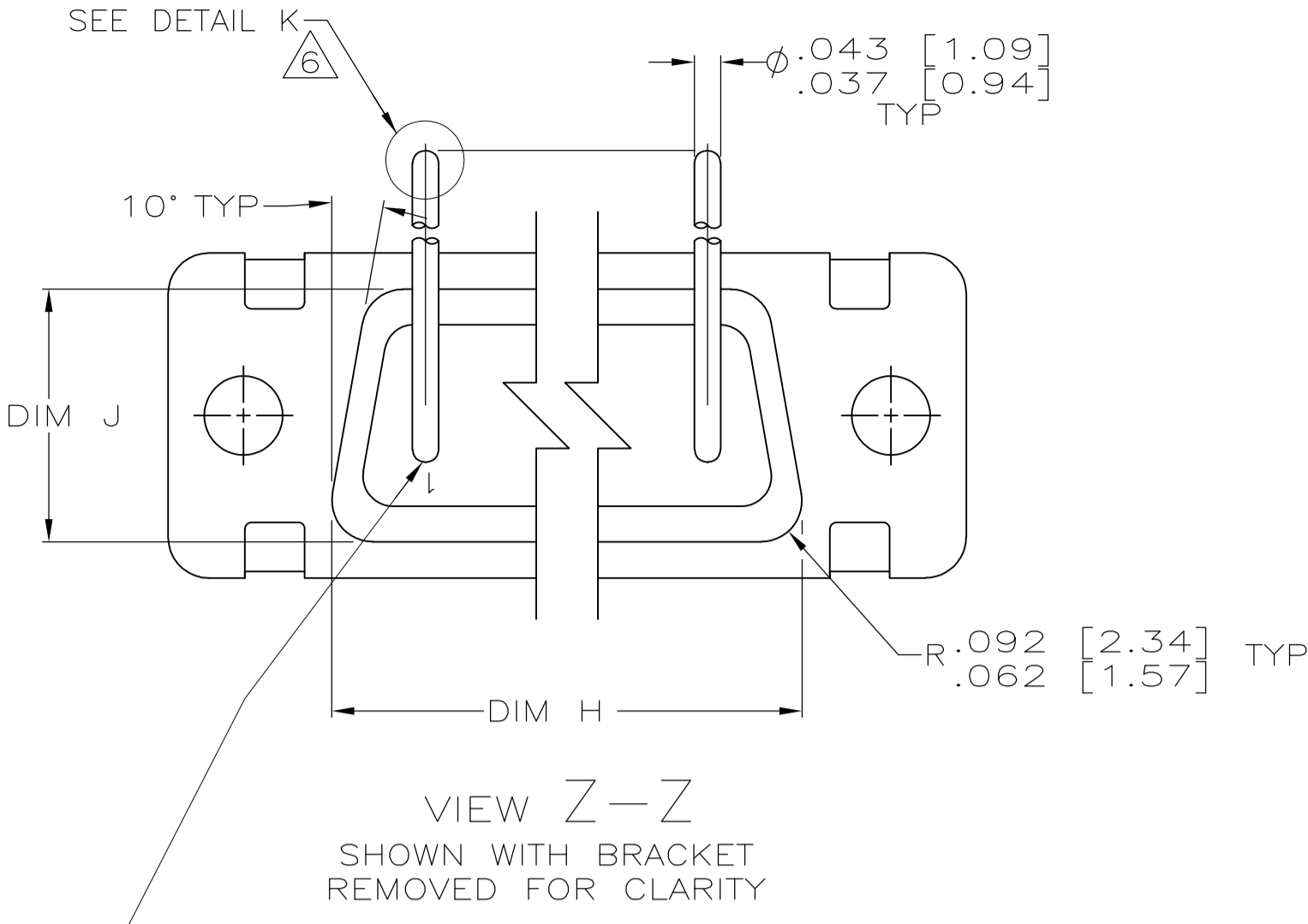
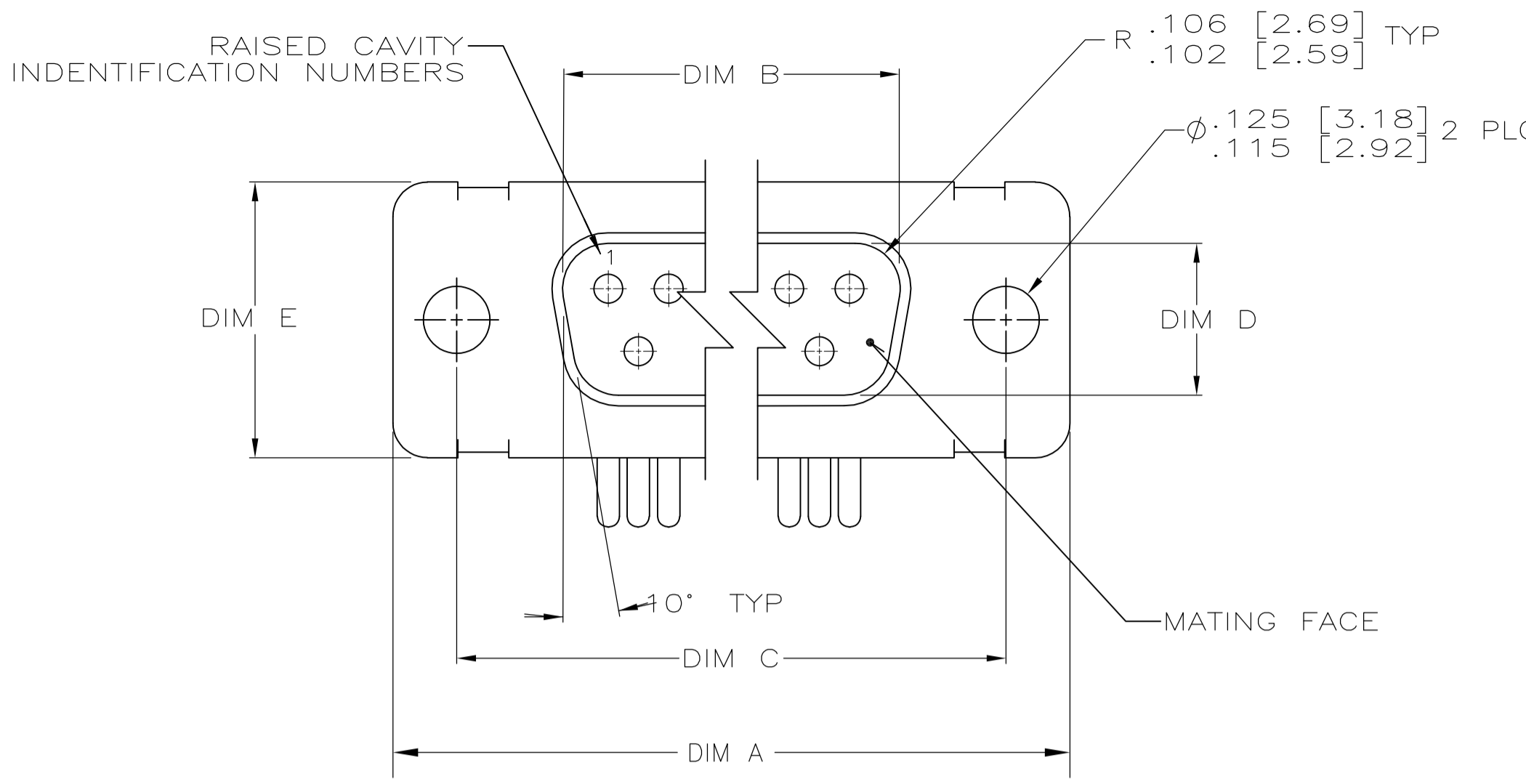


| LOC | DIST                  | REVISIONS   |         |    |      |
|-----|-----------------------|-------------|---------|----|------|
| P   | LTR                   | DESCRIPTION | DATE    | DN | APVD |
| C   | REV PER ECO-07-017102 |             | 21SEP07 | PY | BW   |



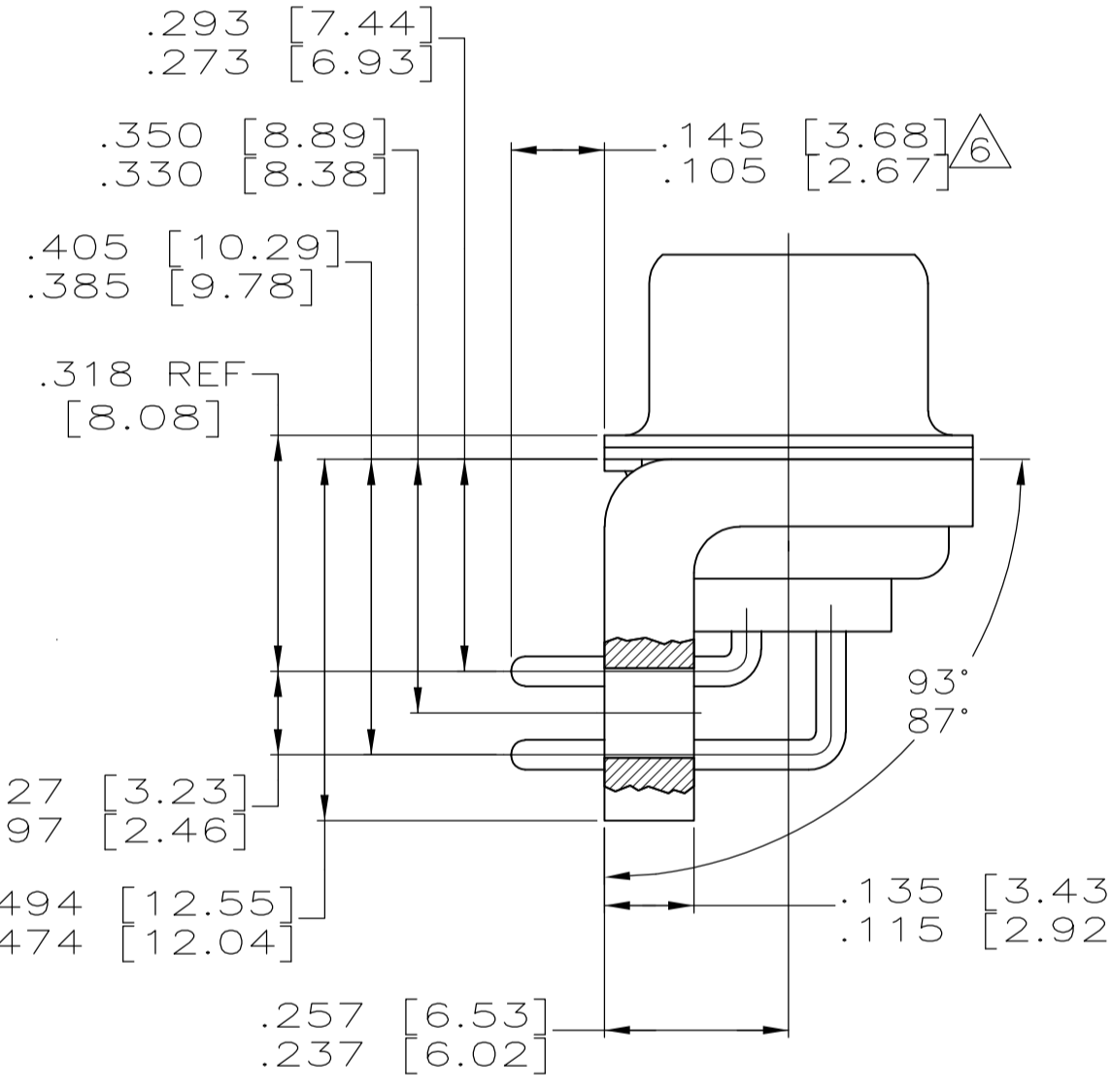
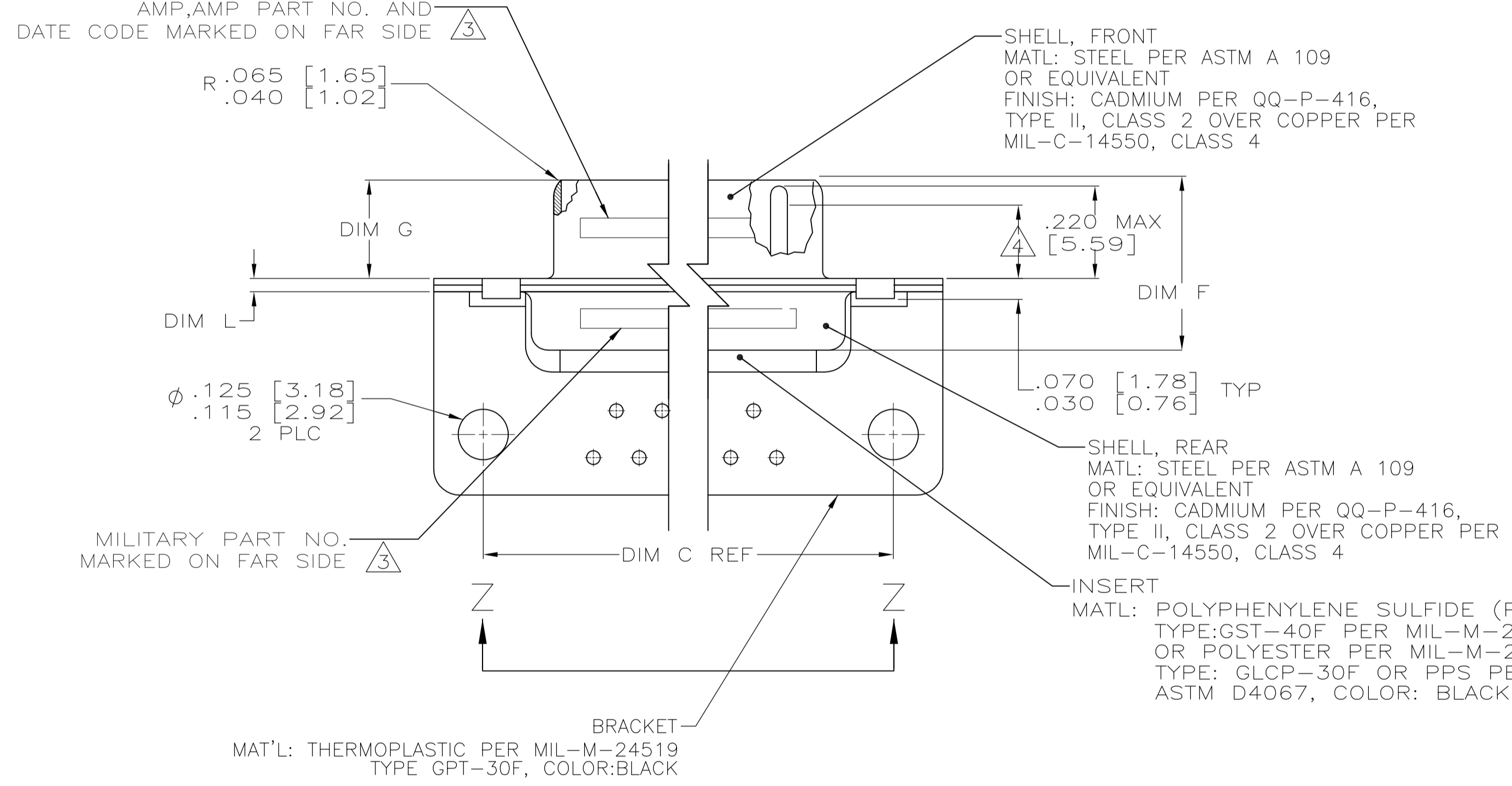
CONTACT (QTY = NO. OF POSN)  
 MATL: BRASS PER ASTM-B-16, OR BERYLLIUM COPPER PER ASTM-B-194  
 FINISH: GOLD PER MIL-G-45204, TYPE II, GRADE C, CLASS 1 IN CONTACT MATING AREA, .000010 [0.0003] MIN THK GOLD PER MIL-G-45204 OVER .000050 [0.0013] MIN THK NICKEL PER QQ-N-290 ON CONTACT BODY

- 1. SEE SHEET 2 FOR RECOMMENDED P.C. BOARD LAYOUT. TRUE POSITION TOLERANCE FOR P.C. BOARD LAYOUT IS .010 [0.25] AT MAX MATERIAL CONDITION. SUGGESTED BOARD THICKNESS IS .062 [1.57]
- 2. THE CONNECTORS DESCRIBED IN THIS DOCUMENT MEET THE REQUIREMENTS OF MIL-C-24308 AND MATE WITH ANY RECEPTACLE CONNECTOR WITH SAME INSERT ARRANGEMENT.
- 3. MARKED WITH .047 [1.19]-.062 [1.57] HIGH CHARACTERS. FAR SIDE REFERS TO THE WIDE SIDE OF THE KEYSTONE. NEAR SIDE REFERS TO THE NARROW SIDE OF THE KEYSTONE. IF THE REAR SHELL IS TOO SMALL FOR THE ENTIRE MILITARY PART NUMBER, MARKING SHALL BE LOCATED AS FOLLOWS:
  - A. "M24308" ON FRONT SHELL, FAR SIDE.
  - B. SLASH SHEET AND DASH NUMBER ON REAR SHELL, FAR SIDE.
  - C. "AMP" AND DATE CODE ON FRONT SHELL, NEAR SIDE.
  - D. AMP PART NUMBER ON REAR SHELL, NEAR SIDE.

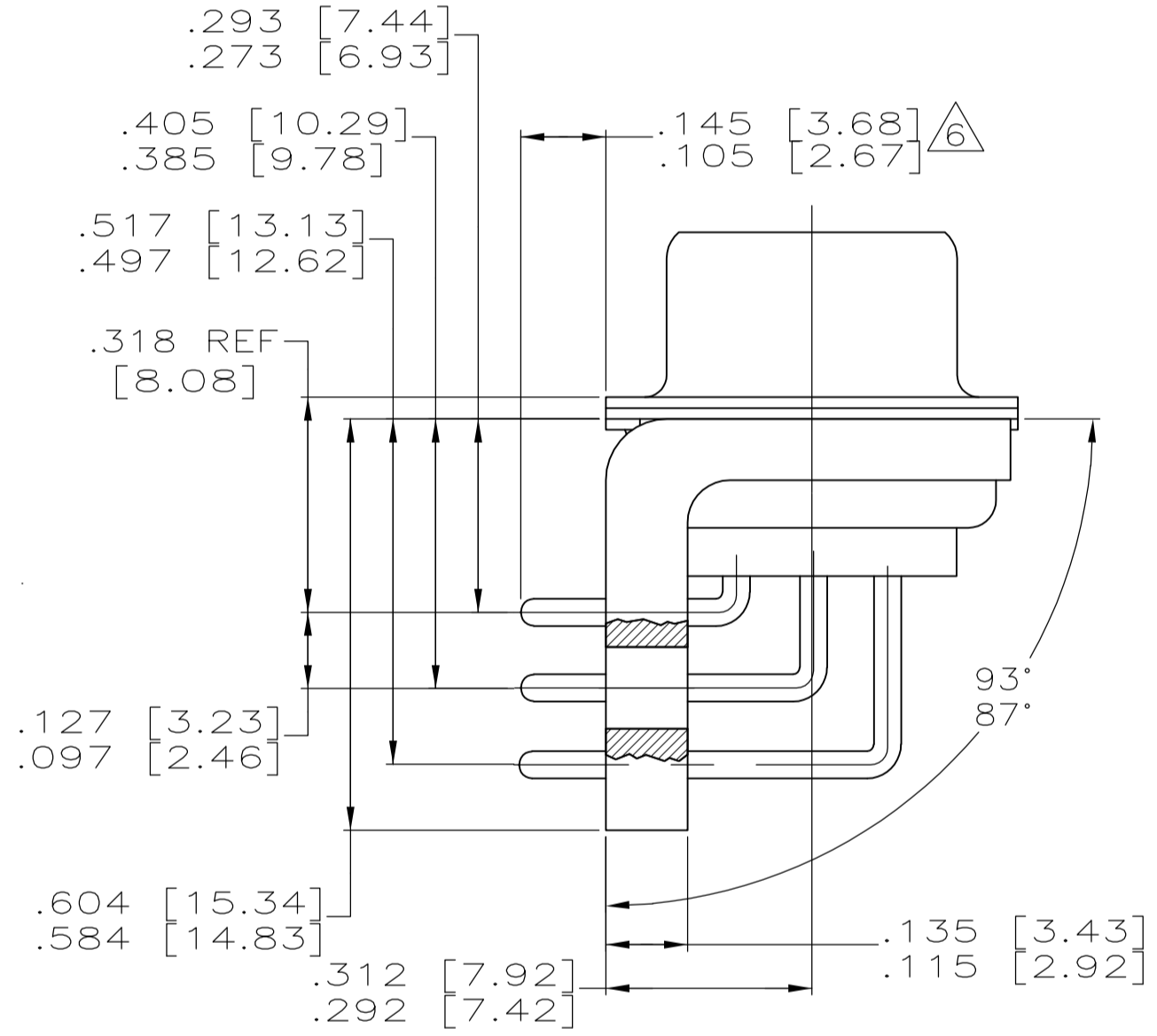
IF THE FRONT SHELL IS TOO SMALL FOR "AMP", AMP PART NUMBER AND DATE CODE, MARKING SHALL BE SPLIT AS FOLLOWS:

- A. AMP PART NUMBER ON REAR SHELL, NEAR SIDE.
- B. "AMP" AND DATE CODE ON FRONT SHELL, NEAR SIDE.
- C. MILITARY PART NUMBER ON REAR SHELL, FAR SIDE.

- 4. REQUIREMENT FOR FULL PIN DIAMETER EXTENSION:
  - .159 [4.04] MIN, SHELL SIZES 1 AND 2.
  - .150 [3.81] MIN, SHELL SIZES 3 AND 4.
- 5. THIS DRAWING SHALL BE INTERPRETED IN ACCORDANCE WITH APPLICABLE STANDARDS LISTED IN MIL-STD-100.
- 6. SOLDER DIPPED PER MIL-STD-2000 COMPOSITION Sn63 CONFORMING TO QQ-S-571 IN THE ENTIRE AREA OF DIMENSION SHOWN. 1218442-6 THRU -10 ONLY.



SHELL SIZES 1 THRU 4 CONTACT CONFIGURATION

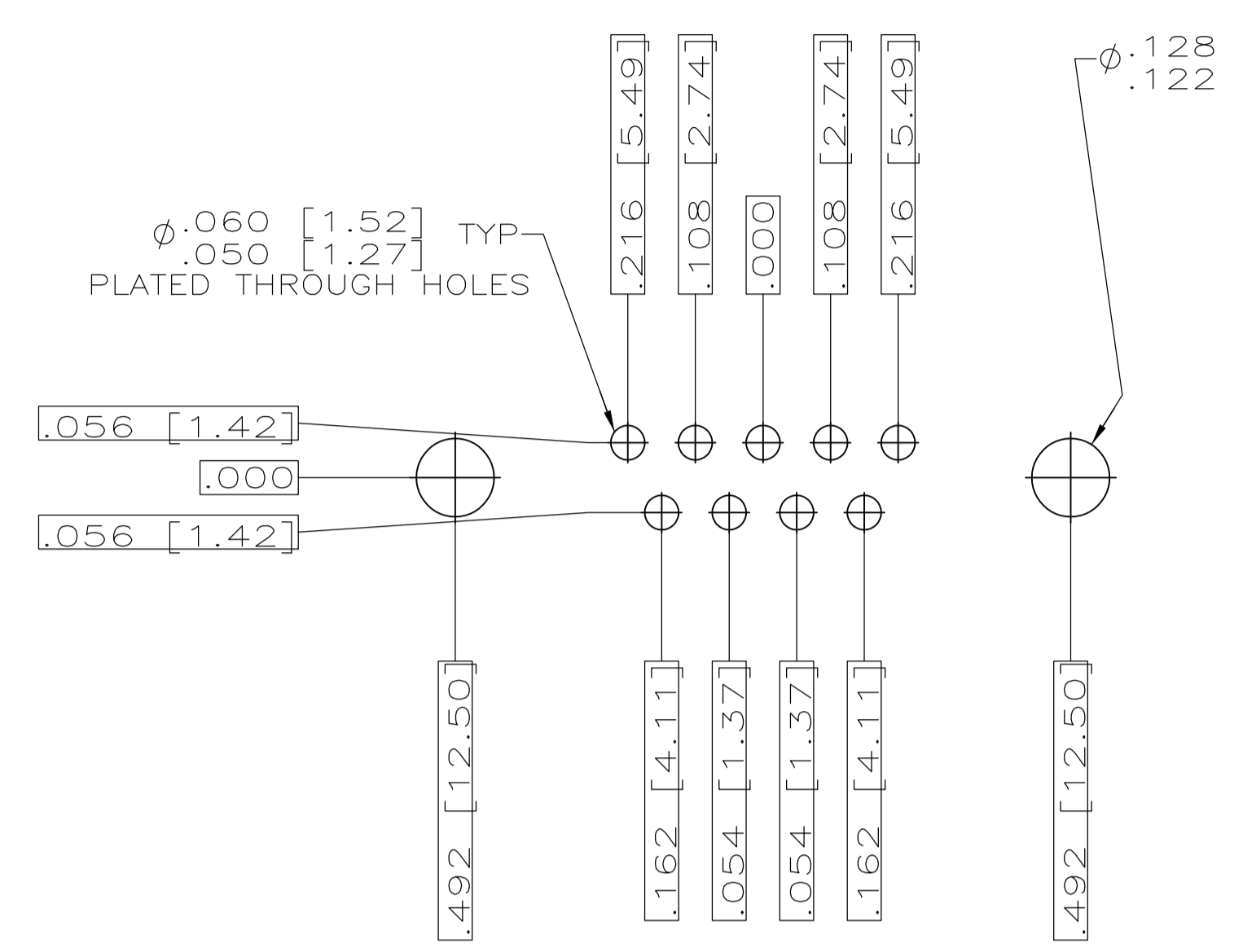


SHELL SIZE 5 CONTACT CONFIGURATION

|             |              |               |             |              |              |              |               |               |               |           |    |   |               |           |             |
|-------------|--------------|---------------|-------------|--------------|--------------|--------------|---------------|---------------|---------------|-----------|----|---|---------------|-----------|-------------|
| .049 [1.24] | .544 [13.82] | 2.188 [55.58] | .236 [5.99] | .436 [11.07] | .620 [15.75] | .446 [11.33] | 2.411 [61.24] | 2.084 [52.55] | 2.650 [67.31] | MS18277-1 | 50 | 5 | M24308/24-41F | 1218442-5 | 1-1218442-0 |
| .029 [0.74] | .524 [13.31] | 2.168 [55.07] | .224 [5.69] | .416 [10.57] | .590 [14.99] | .436 [11.07] | 2.401 [60.99] | 2.074 [52.30] | 2.620 [66.55] | MS18276-1 | 37 | 4 | M24308/24-40F | 1218442-4 | 1218442-9   |
| .049 [1.24] | .432 [10.97] | 2.282 [57.96] | .236 [5.99] | .436 [11.07] | .509 [12.93] | .334 [8.48]  | 2.505 [63.63] | 2.187 [54.97] | 2.744 [69.70] | MS18275-1 | 25 | 3 | M24308/24-39F | 1218442-3 | 1218442-8   |
| .029 [0.74] | .412 [10.46] | 2.262 [57.45] | .224 [5.69] | .416 [10.57] | .479 [12.17] | .324 [8.23]  | 2.495 [63.37] | 2.177 [54.71] | 2.714 [68.94] | MS18274-1 | 15 | 2 | M24308/24-38F | 1218442-2 | 1218442-7   |
| .049 [1.24] | .432 [10.97] | 1.635 [41.53] | .236 [5.99] | .436 [11.07] | .509 [12.93] | .334 [8.48]  | 1.857 [47.17] | 1.539 [38.51] | 2.103 [53.42] | MS18273-1 | 9  | 1 | M24308/24-37F | 1218442-1 | 1218442-6   |
| .029 [0.74] | .412 [10.46] | 1.615 [41.02] | .224 [5.69] | .416 [10.57] | .479 [12.17] | .324 [8.23]  | 1.847 [46.91] | 1.529 [38.25] | 2.073 [52.65] | MS18277-1 | 50 | 5 | M24308/24-41F | 1218442-5 | 1218442-5   |
| .049 [1.24] | .432 [10.97] | 2.282 [57.96] | .236 [5.99] | .436 [11.07] | .509 [12.93] | .334 [8.48]  | 2.505 [63.63] | 2.187 [54.97] | 2.744 [69.70] | MS18276-1 | 37 | 4 | M24308/24-40F | 1218442-4 | 1218442-4   |
| .029 [0.74] | .412 [10.46] | 2.262 [57.45] | .224 [5.69] | .416 [10.57] | .479 [12.17] | .324 [8.23]  | 2.495 [63.37] | 2.177 [54.71] | 2.714 [68.94] | MS18275-1 | 25 | 3 | M24308/24-39F | 1218442-3 | 1218442-3   |
| .049 [1.24] | .432 [10.97] | 1.635 [41.53] | .236 [5.99] | .436 [11.07] | .509 [12.93] | .334 [8.48]  | 1.857 [47.17] | 1.539 [38.51] | 2.103 [53.42] | MS18274-1 | 15 | 2 | M24308/24-38F | 1218442-2 | 1218442-2   |
| .029 [0.74] | .412 [10.46] | 1.615 [41.02] | .224 [5.69] | .416 [10.57] | .479 [12.17] | .324 [8.23]  | 1.847 [46.91] | 1.529 [38.25] | 2.073 [52.65] | MS18273-1 | 9  | 1 | M24308/24-37F | 1218442-1 | 1218442-1   |
| .049 [1.24] | .544 [13.82] | 2.188 [55.58] | .236 [5.99] | .436 [11.07] | .620 [15.75] | .446 [11.33] | 2.411 [61.24] | 2.084 [52.55] | 2.650 [67.31] | MS18277-1 | 50 | 5 | M24308/24-41F | 1218442-5 | 1218442-5   |
| .029 [0.74] | .524 [13.31] | 2.168 [55.07] | .224 [5.69] | .416 [10.57] | .590 [14.99] | .436 [11.07] | 2.401 [60.99] | 2.074 [52.30] | 2.620 [66.55] | MS18276-1 | 37 | 4 | M24308/24-40F | 1218442-4 | 1218442-4   |
| .049 [1.24] | .432 [10.97] | 2.282 [57.96] | .236 [5.99] | .436 [11.07] | .509 [12.93] | .334 [8.48]  | 2.505 [63.63] | 2.187 [54.97] | 2.744 [69.70] | MS18275-1 | 25 | 3 | M24308/24-39F | 1218442-3 | 1218442-3   |
| .029 [0.74] | .412 [10.46] | 2.262 [57.45] | .224 [5.69] | .416 [10.57] | .479 [12.17] | .324 [8.23]  | 2.495 [63.37] | 2.177 [54.71] | 2.714 [68.94] | MS18274-1 | 15 | 2 | M24308/24-38F | 1218442-2 | 1218442-2   |
| .049 [1.24] | .432 [10.97] | 1.635 [41.53] | .236 [5.99] | .436 [11.07] | .509 [12.93] | .334 [8.48]  | 1.857 [47.17] | 1.539 [38.51] | 2.103 [53.42] | MS18273-1 | 9  | 1 | M24308/24-37F | 1218442-1 | 1218442-1   |
| .029 [0.74] | .412 [10.46] | 1.615 [41.02] | .224 [5.69] | .416 [10.57] | .479 [12.17] | .324 [8.23]  | 1.847 [46.91] | 1.529 [38.25] | 2.073 [52.65] | MS18277-1 | 50 | 5 | M24308/24-41F | 1218442-5 | 1218442-5   |
| .049 [1.24] | .432 [10.97] | 2.282 [57.96] | .236 [5.99] | .436 [11.07] | .509 [12.93] | .334 [8.48]  | 2.505 [63.63] | 2.187 [54.97] | 2.744 [69.70] | MS18276-1 | 37 | 4 | M24308/24-40F | 1218442-4 | 1218442-4   |
| .029 [0.74] | .412 [10.46] | 2.262 [57.45] | .224 [5.69] | .416 [10.57] | .479 [12.17] | .324 [8.23]  | 2.495 [63.37] | 2.177 [54.71] | 2.714 [68.94] | MS18275-1 | 25 | 3 | M24308/24-39F | 1218442-3 | 1218442-3   |
| .049 [1.24] | .432 [10.97] | 1.635 [41.53] | .236 [5.99] | .436 [11.07] | .509 [12.93] | .334 [8.48]  | 1.857 [47.17] | 1.539 [38.51] | 2.103 [53.42] | MS18274-1 | 15 | 2 | M24308/24-38F | 1218442-2 | 1218442-2   |
| .029 [0.74] | .412 [10.46] | 1.615 [41.02] | .224 [5.69] | .416 [10.57] | .479 [12.17] | .324 [8.23]  | 1.847 [46.91] | 1.529 [38.25] | 2.073 [52.65] | MS18273-1 | 9  | 1 | M24308/24-37F | 1218442-1 | 1218442-1   |

| DIM L | DIM J | DIM H | DIM G | DIM F | DIM E | DIM D | DIM C | DIM B | DIM A | INSERT ARRANGEMENT | NO OF POS | SHELL SIZE | MILITARY P/N ON CONNECTOR | AMP P/N MARKED ON CONNECTOR | AMP PART NO. |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-----------|------------|---------------------------|-----------------------------|--------------|
|       |       |       |       |       |       |       |       |       |       |                    |           |            |                           |                             |              |

DETAIL K  
 SCALE 8:1  
 FOR 1218442-6 THRU -10 ONLY



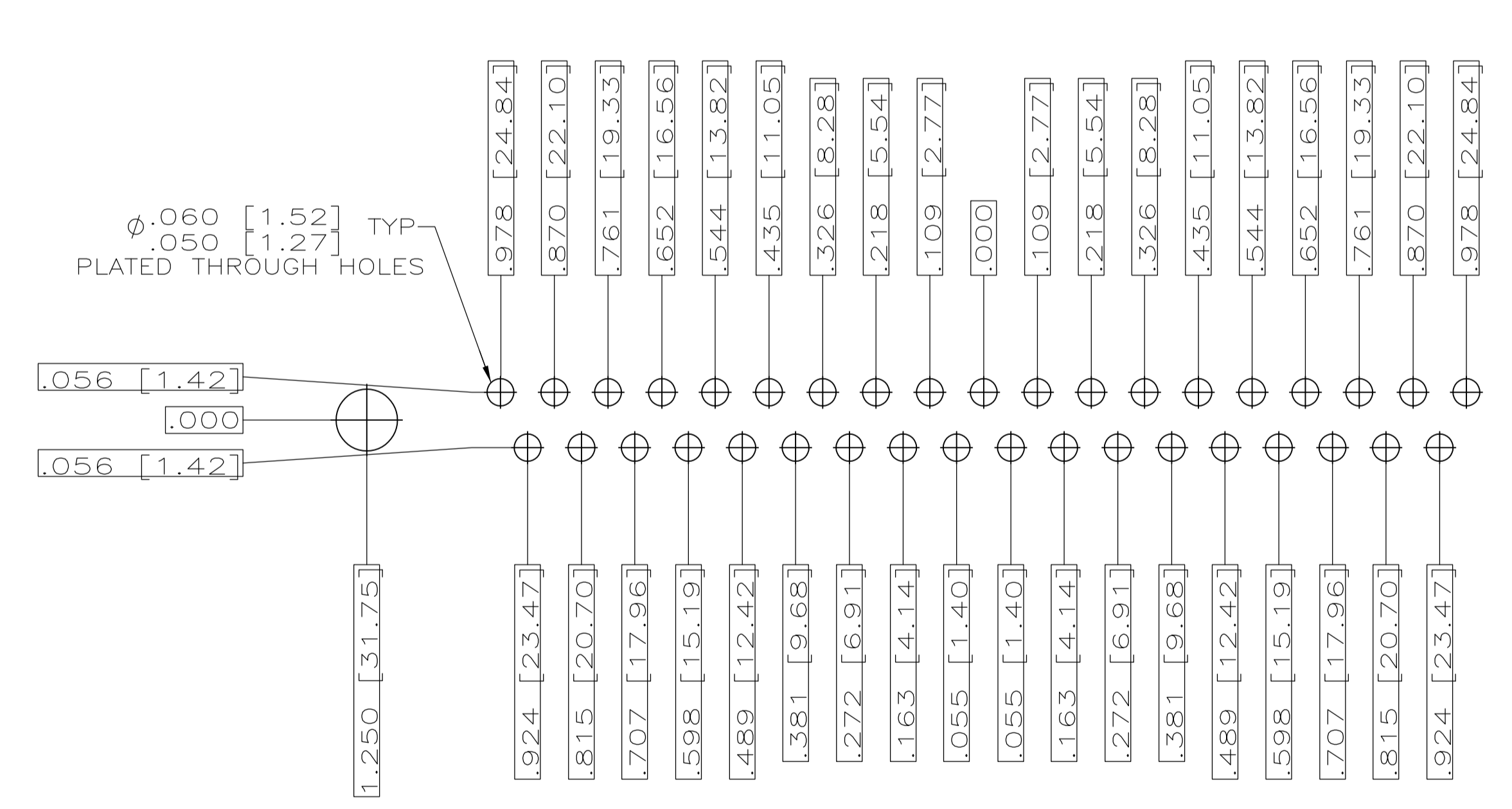
RECOMMENDED P.C. BOARD LAYOUT  
SHELL SIZE 1 (9 POSITION) ⚠



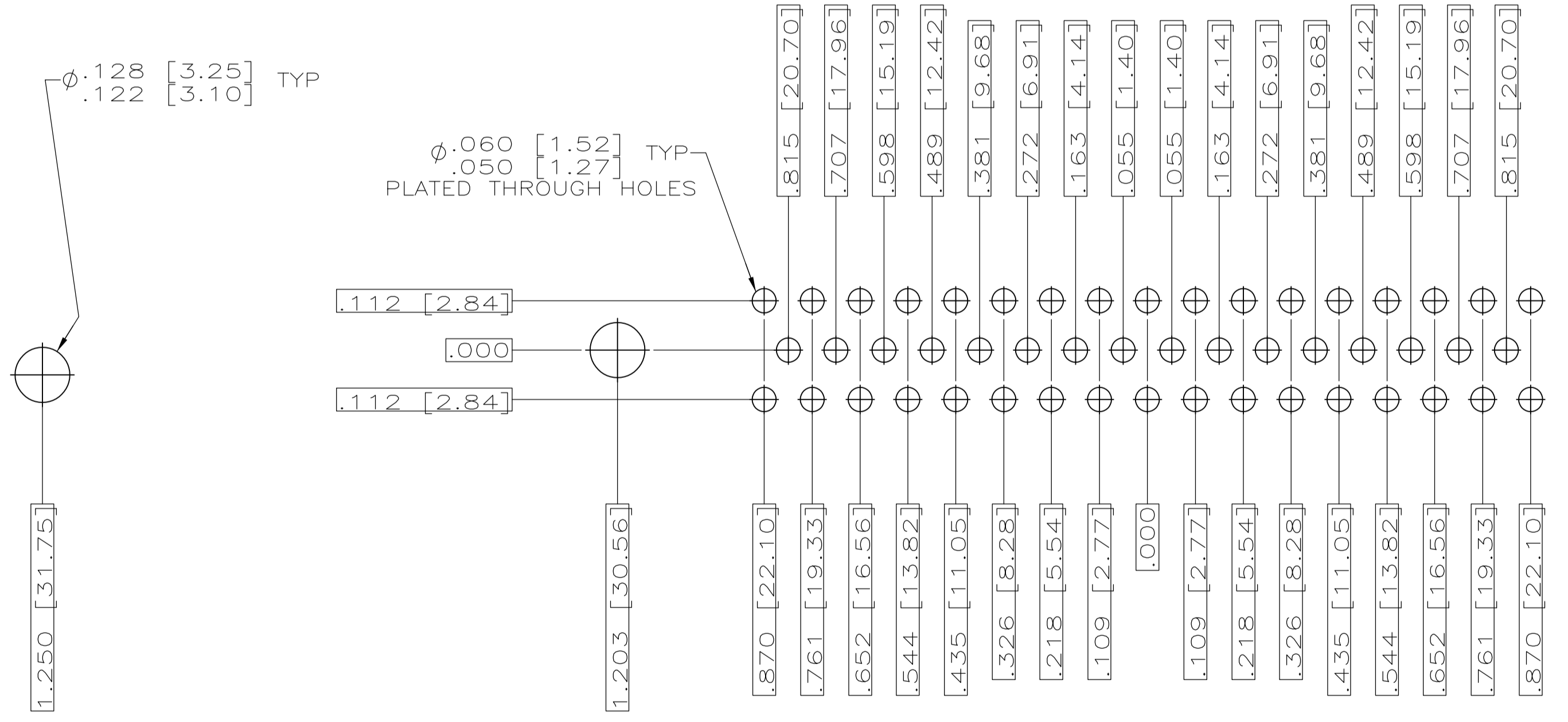
RECOMMENDED P.C. BOARD LAYOUT  
SHELL SIZE 2 (15 POSITION) ⚠



RECOMMENDED P.C. BOARD LAYOUT  
SHELL SIZE 3 (25 POSITION) ⚠



RECOMMENDED P.C. BOARD LAYOUT  
SHELL SIZE 4 (37 POSITION) ⚠



RECOMMENDED P.C. BOARD LAYOUT  
SHELL SIZE 5 (50 POSITION) ⚠

|   |  |                             |   |            |
|---|--|-----------------------------|---|------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.  |  | DN<br>C.C.THOMAS 12-6-99    | Tyco Electronics Corporation<br>Tyco Electronics Corporation<br>Harrisburg, PA 17105-3608 |            |
| DIMENSIONS:<br>INCHES   |  | CHK<br>CHAD BAKER 12-15-99  | NAME<br>PLUG ASSY,AMPLIMITE<br>RIGHT ANGLE,SERIES 109,SIZE<br>1 THRU 5                    |            |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:<br>0 PL ± .005<br>1 PL ± .005<br>2 PL ± .005<br>3 PL ± .005<br>4 PL ± .005<br>ANGLES ± .1° |  | APVD<br>CHAD BAKER 12-15-99 | RESTRICTED TO   |            |
| MATERIAL<br>SEE CALLOUTS  |  | FINISH<br>SEE CALLOUTS      | WEIGHT<br>-   | SIZE<br>A1 |
| CUSTOMER DRAWING  |  | SCALE<br>4:1                | SHEET<br>2 OF 2   | REV<br>C   |