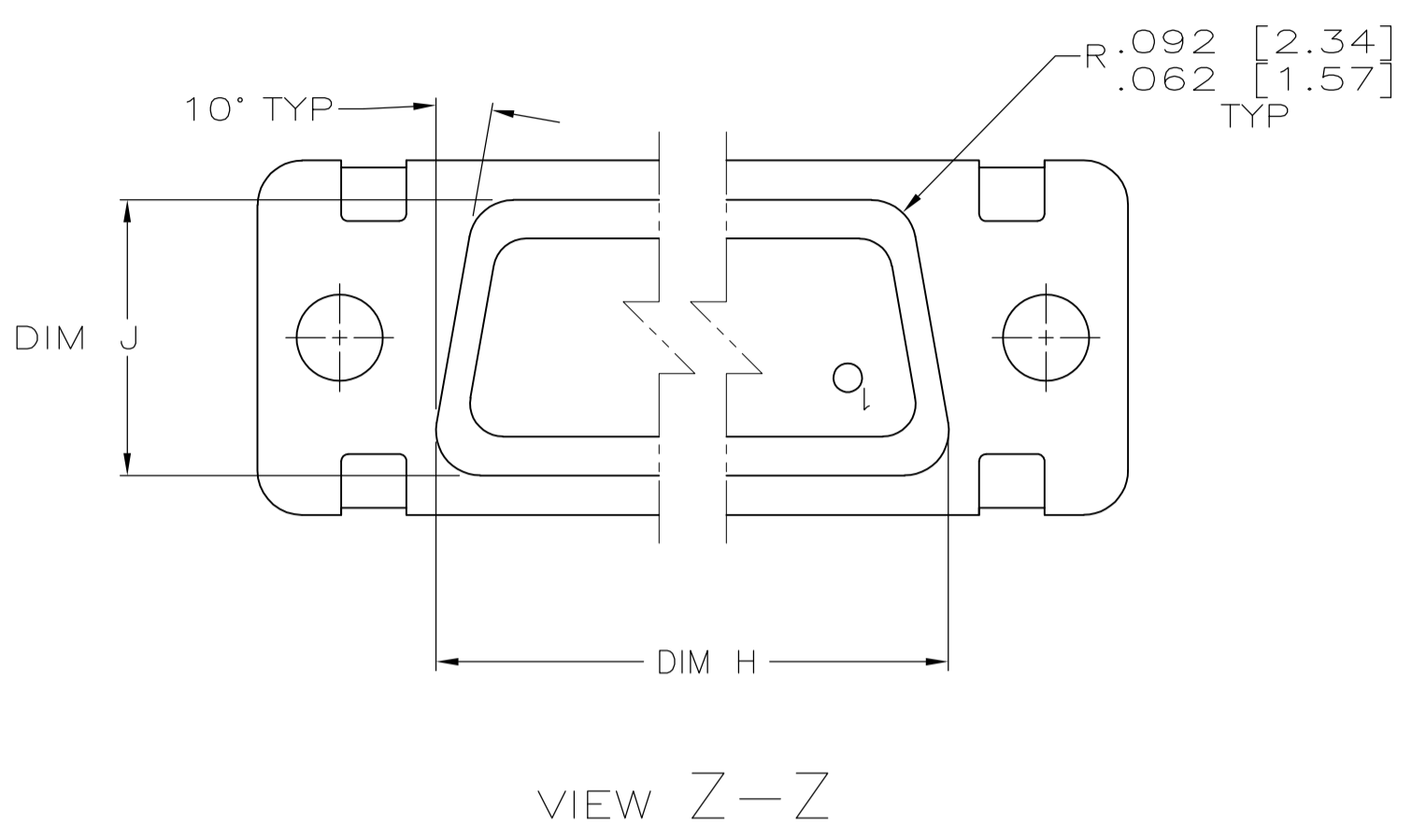
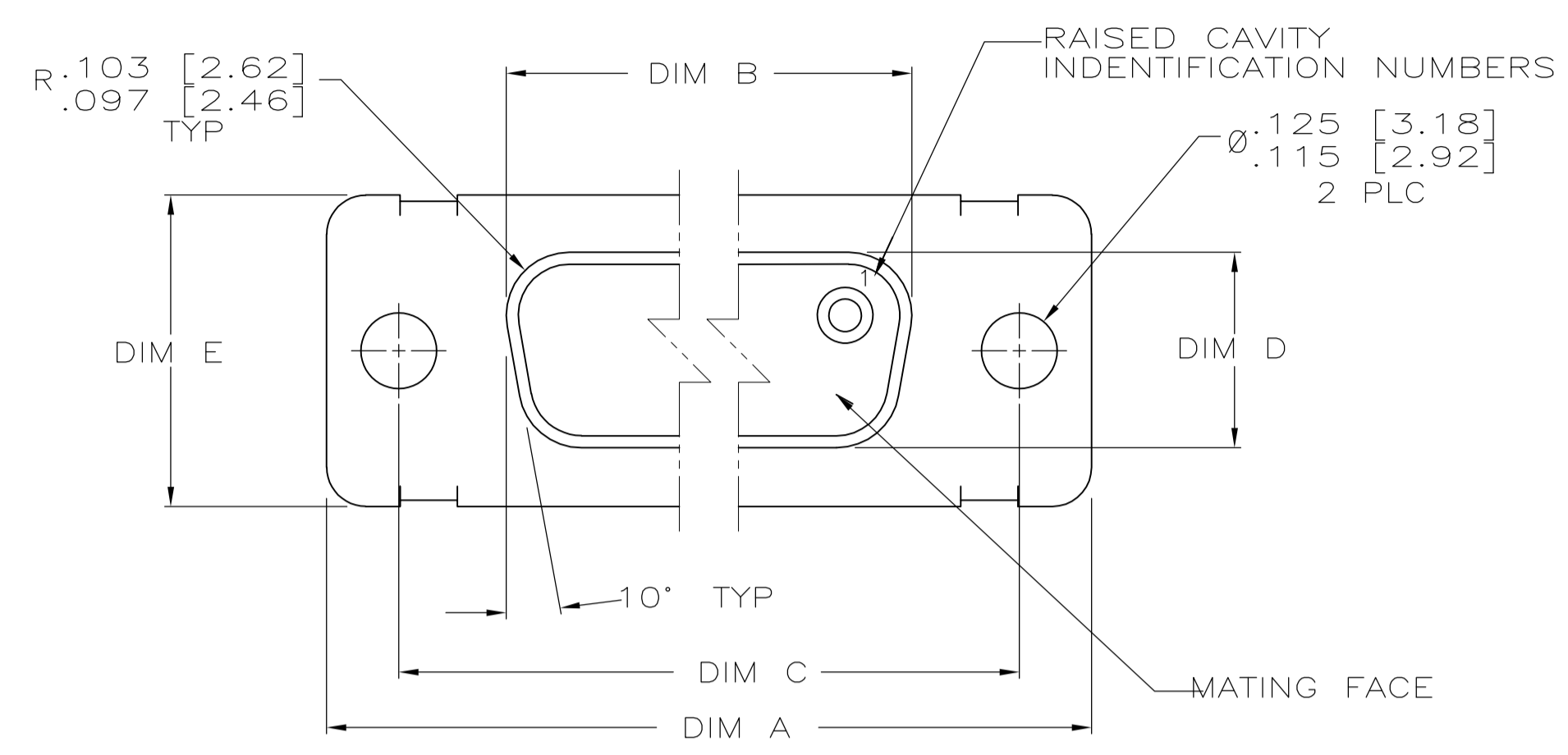
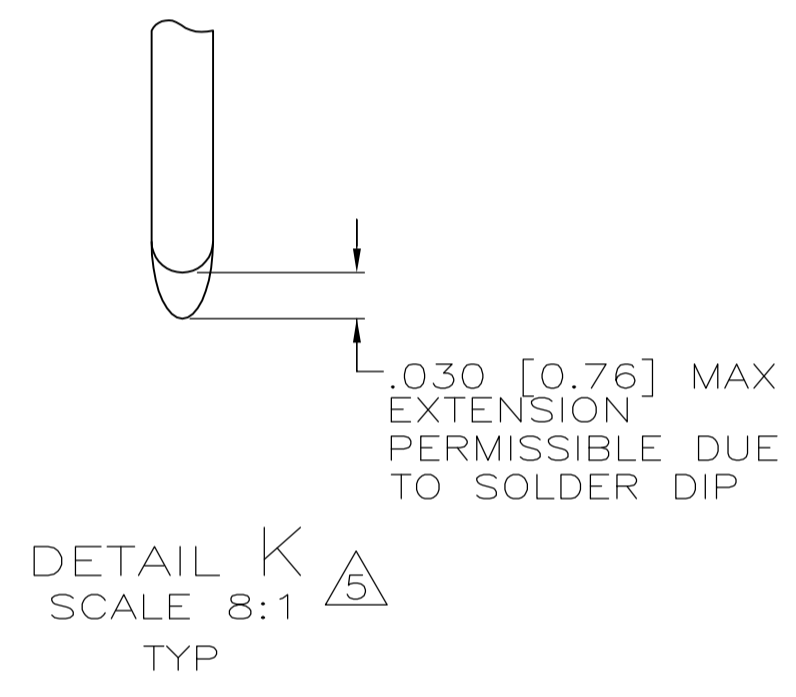
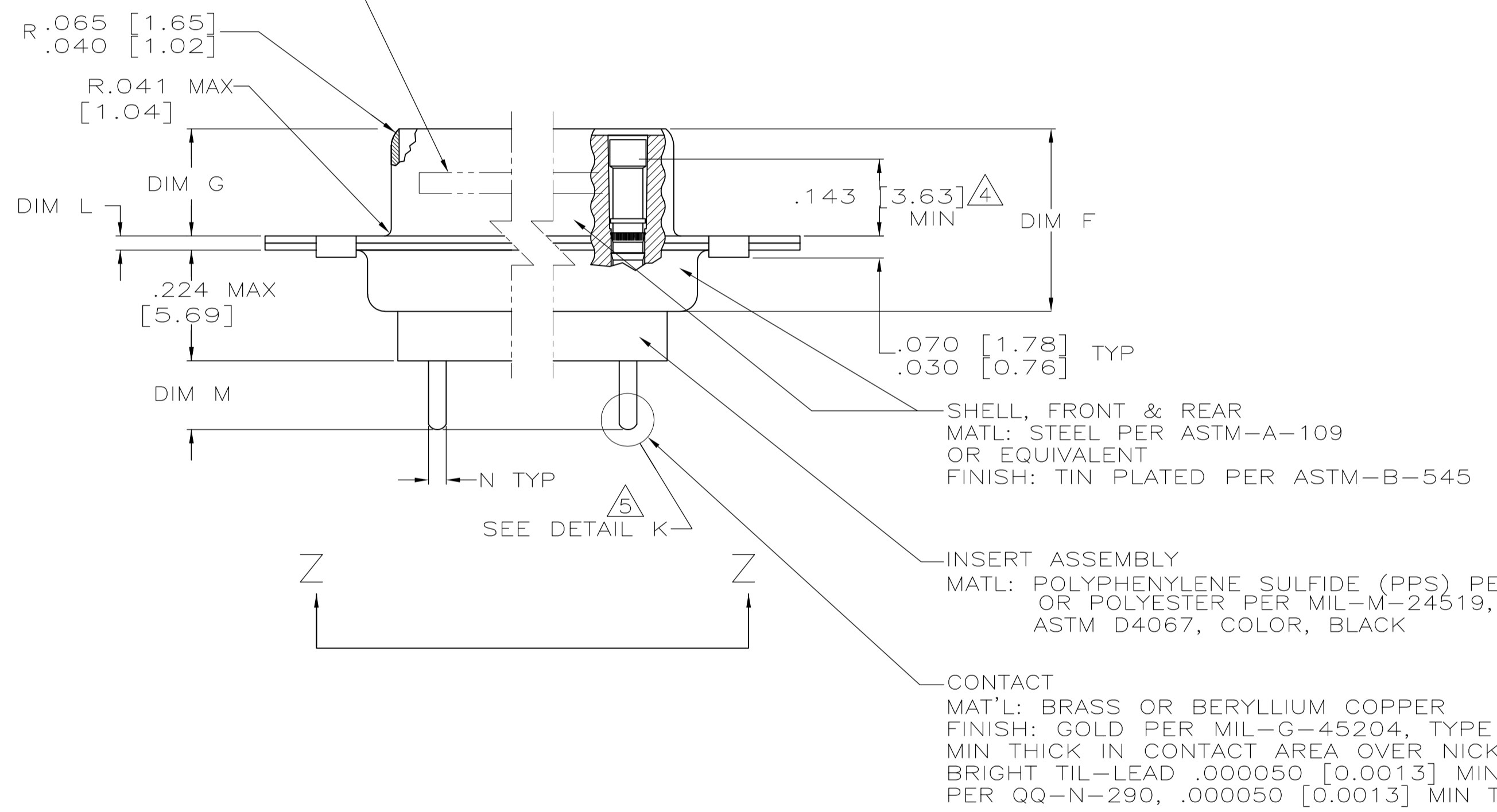


REVISONS		DATE	BY	APPV
C	REVISED PER ECO-09-008889	24-03-09	CT	RL

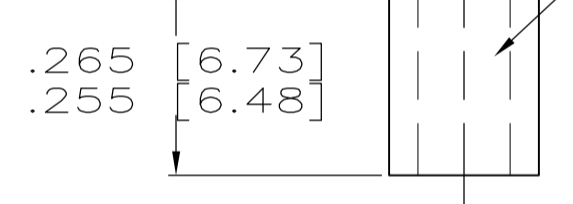


- 1. SEE SHEET 2 FOR RECOMMENDED P.C. BOARD LAYOUT. TRUE POSITION TOLERANCE FOR P.C. BOARD LAYOUT IS .010 [0.25] AT MAX MATERIAL CONDITION. SUGGESTED BOARD THICKNESS IS .125 [3.18]
- 2. THE CONNECTORS DESCRIBED IN THIS DOCUMENT WILL MATE WITH ANY PLUG CONNECTOR WITH THE SAME INSERT ARRANGEMENT.
- 3. 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 FRONT SHELL IS TOO SMALL FOR "TE", TE PART NUMBER AND DATE CODE, THEN SPLIT AS FOLLOWS:
 - A. TE PART NUMBER ON REAR SHELL, NEAR SIDE.
 - B. "TE" AND DATE CODE ON FRONT SHELL, NEAR SIDE.
- 4. POINT OF ELECTRICAL ENGAGEMENT - AS MEASURED WITH A .0390 [0.991]-.0393 [0.998] DIA SQUARE ENDED TEST PIN.
- 5. SOLDER DIPPED PER MIL-STD-2000 COMPOSITION Sn63 CONFORMING TO QQ-S-571. COVERAGE SHALL BE COMPLETE TO A DISTANCE .020 [0.51] MAX FROM INSERT ASSEMBLY.
- 6. SPACERS (QTY 2) ARE SUPPLIED WITH CONNECTORS (NOT ATTACHED TO THE CONNECTOR).
- 7. DIMENSIONS APPLY PRIOR TO SOLDER DIPPING.

3 MARK TE, TE PART NO AND DATE CODE, FAR SIDE.



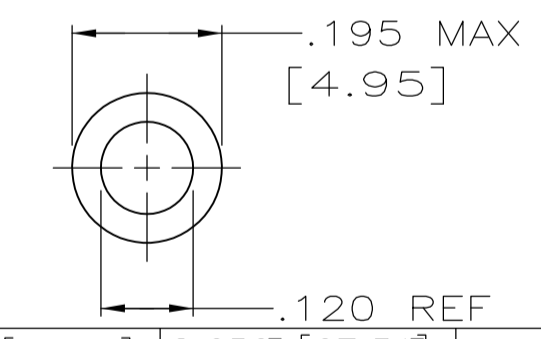
6 SPACER
MATL: ALUMINUM ALLOY PER ASTM-B-211
FINISH: IRIDIUM PER MIL-C-5541, CLASS 3, COLOR GOLD



SHELL, FRONT & REAR
MATL: STEEL PER ASTM-A-109 OR EQUIVALENT
FINISH: TIN PLATED PER ASTM-B-545

INSERT ASSEMBLY
MATL: POLYPHENYLENE SULFIDE (PPS) PER MIL-M-24519, TYPE: GST-40F OR POLYESTER PER MIL-M-24519, TYPE: GLCP-30F, OR PPS PER ASTM D4067, COLOR, BLACK

CONTACT
MATL: BRASS OR BERYLLIUM COPPER
FINISH: GOLD PER MIL-G-45204, TYPE II, GRADE C, CLASS O, .000030 [0.0008] MIN THICK IN CONTACT AREA OVER NICKEL .000050 [0.0013] MIN THICK BRIGHT TIL-LEAD .000050 [0.0013] MIN THICK OVER NICKEL PER QQ-N-290, .000050 [0.0013] MIN THICK ON CONTACT BODY



N	M	L	J	H	G	F	E	D	C	B	A	ARRANGEMENT	NO OF POS	SHELL SIZE	TE PN ON CONNECTOR	PART NUMBER
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.544 [13.82] [13.31 52.4]	2.188 [55.58] [2.168 55.07]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.620 [15.75] [14.99 59.0]	.428 [10.87] [4.18 10.62]	2.411 [61.24] [2.401 60.99]	2.069 [52.55] [2.059 52.30]	2.650 [67.51] [2.620 66.55]	MS18277-1	50	5	1218293-5	1-1218293-0
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.432 [10.97] [10.46 41.2]	2.282 [57.96] [2.262 57.45]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.509 [12.93] [12.17 47.9]	.316 [8.03] [3.06 7.77]	2.505 [63.63] [2.495 63.37]	2.164 [54.97] [2.154 54.71]	2.744 [69.70] [2.714 68.94]	MS18276-1	37	4	1218293-4	1218293-9
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.432 [10.97] [10.46 41.2]	1.635 [41.53] [1.615 41.02]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.509 [12.93] [12.17 47.9]	.316 [8.03] [3.06 7.77]	1.857 [47.17] [1.847 46.91]	1.516 [38.51] [1.506 38.25]	2.103 [53.42] [2.073 52.65]	MS18275-1	25	3	1218293-3	1218293-8
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.432 [10.97] [10.46 41.2]	1.093 [27.76] [1.073 27.25]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.509 [12.93] [12.17 47.9]	.316 [8.03] [3.06 7.77]	1.317 [33.45] [1.307 33.20]	.976 [24.79] [1.506 38.25]	1.556 [39.52] [1.526 38.76]	MS18274-1	15	2	1218293-2	1218293-7
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.432 [10.97] [10.46 41.2]	.769 [19.53] [1.073 27.25]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.509 [12.93] [12.17 47.9]	.316 [8.03] [3.06 7.77]	.989 [25.12] [1.307 33.20]	.648 [16.46] [1.506 38.25]	1.228 [31.19] [1.198 30.43]	MS18273-1	9	1	1218293-1	1218293-6
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.544 [13.82] [13.31 52.4]	2.188 [55.58] [2.168 55.07]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.620 [15.75] [14.99 59.0]	.428 [10.87] [4.18 10.62]	2.411 [61.24] [2.401 60.99]	2.069 [52.55] [2.059 52.30]	2.650 [67.51] [2.620 66.55]	MS18277-1	50	5	1218293-5	1218293-5
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.432 [10.97] [10.46 41.2]	2.282 [57.96] [2.262 57.45]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.509 [12.93] [12.17 47.9]	.316 [8.03] [3.06 7.77]	2.505 [63.63] [2.495 63.37]	2.164 [54.97] [2.154 54.71]	2.744 [69.70] [2.714 68.94]	MS18276-1	37	4	1218293-4	1218293-4
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.432 [10.97] [10.46 41.2]	1.635 [41.53] [1.615 41.02]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.509 [12.93] [12.17 47.9]	.316 [8.03] [3.06 7.77]	1.857 [47.17] [1.847 46.91]	1.516 [38.51] [1.506 38.25]	2.103 [53.42] [2.073 52.65]	MS18275-1	25	3	1218293-3	1218293-3
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.432 [10.97] [10.46 41.2]	1.093 [27.76] [1.073 27.25]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.509 [12.93] [12.17 47.9]	.316 [8.03] [3.06 7.77]	1.317 [33.45] [1.307 33.20]	.976 [24.79] [1.506 38.25]	1.556 [39.52] [1.526 38.76]	MS18274-1	15	2	1218293-2	1218293-2
.033 [0.84] [0.27 0.69]	.176 [4.47] [1.36 3.45]	.040 [1.02] [0.51 1.02]	.432 [10.97] [10.46 41.2]	.769 [19.53] [1.073 27.25]	.248 [6.30] [2.38 6.05]	.439 [11.15] [4.19 10.64]	.509 [12.93] [12.17 47.9]	.316 [8.03] [3.06 7.77]	.989 [25.12] [1.307 33.20]	.648 [16.46] [1.506 38.25]	1.228 [31.19] [1.198 30.43]	MS18273-1	9	1	1218293-1	1218293-1

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES
 TOLERANCES UNLESS OTHERWISE SPECIFIED:
 0 PLC ± .0005
 1 PLC ± .0010
 2 PLC ± .0015
 3 PLC ± .0020
 4 PLC ± .0025
 ANGLES ± .0010

MATERIAL: SEE CALLOUTS
 FINISH: SEE CALLOUTS

WEIGHT: —
 CUSTOMER DRAWING: —

DWN: C.C. THOMAS 14OCT99
 CHK: D. HOFFMAN 18OCT99
 APPV: D. HOFFMAN 18OCT99

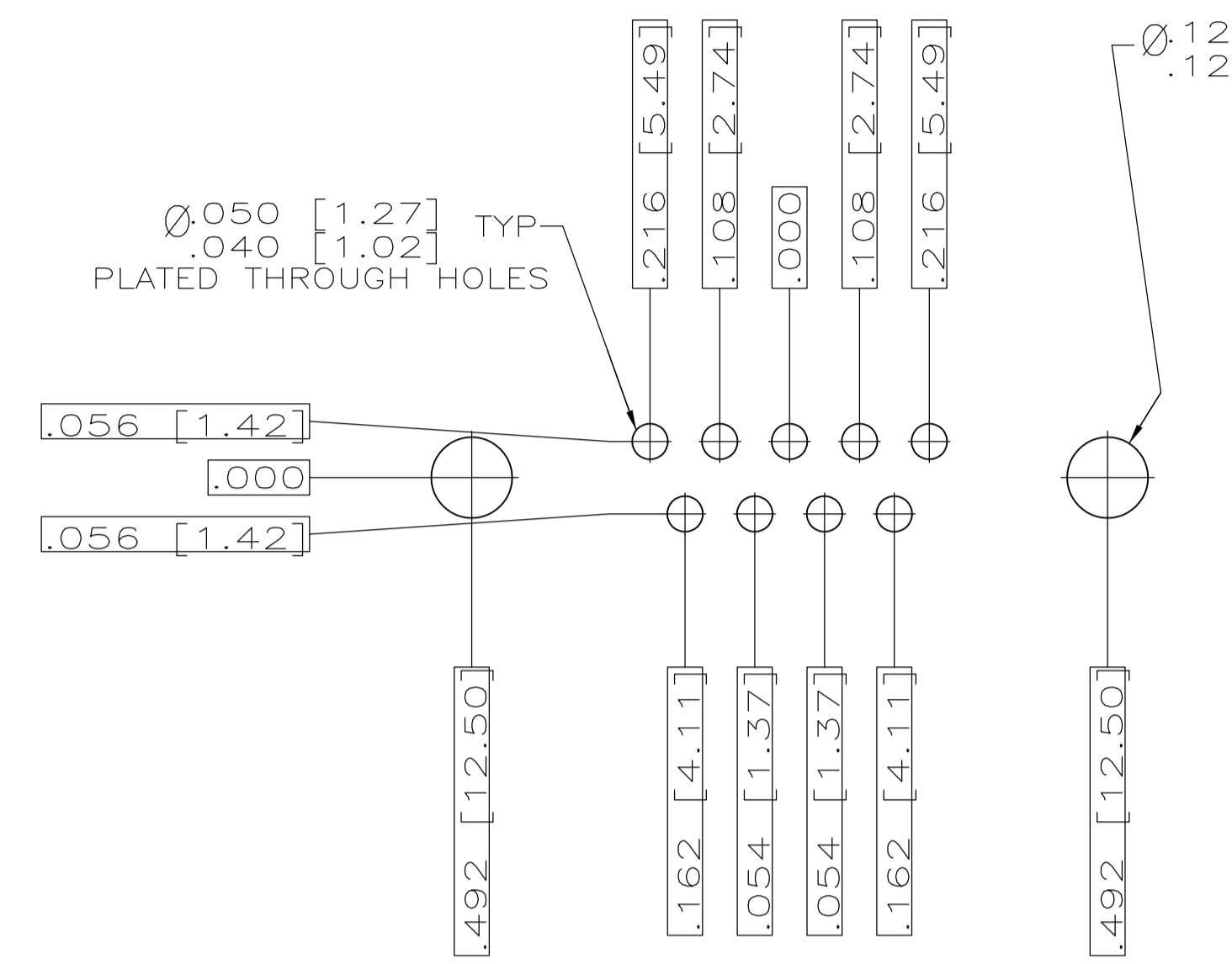
Tyco Electronics Corporation
 Harrisburg, PA 17105-3608

PRODUCT SPEC: AMPHIMITE RECEPTACLE ASSY, LOW PROFILE SIZE 20 POSTED CONTACTS SERIES 109, SIZE 1 THRU 5

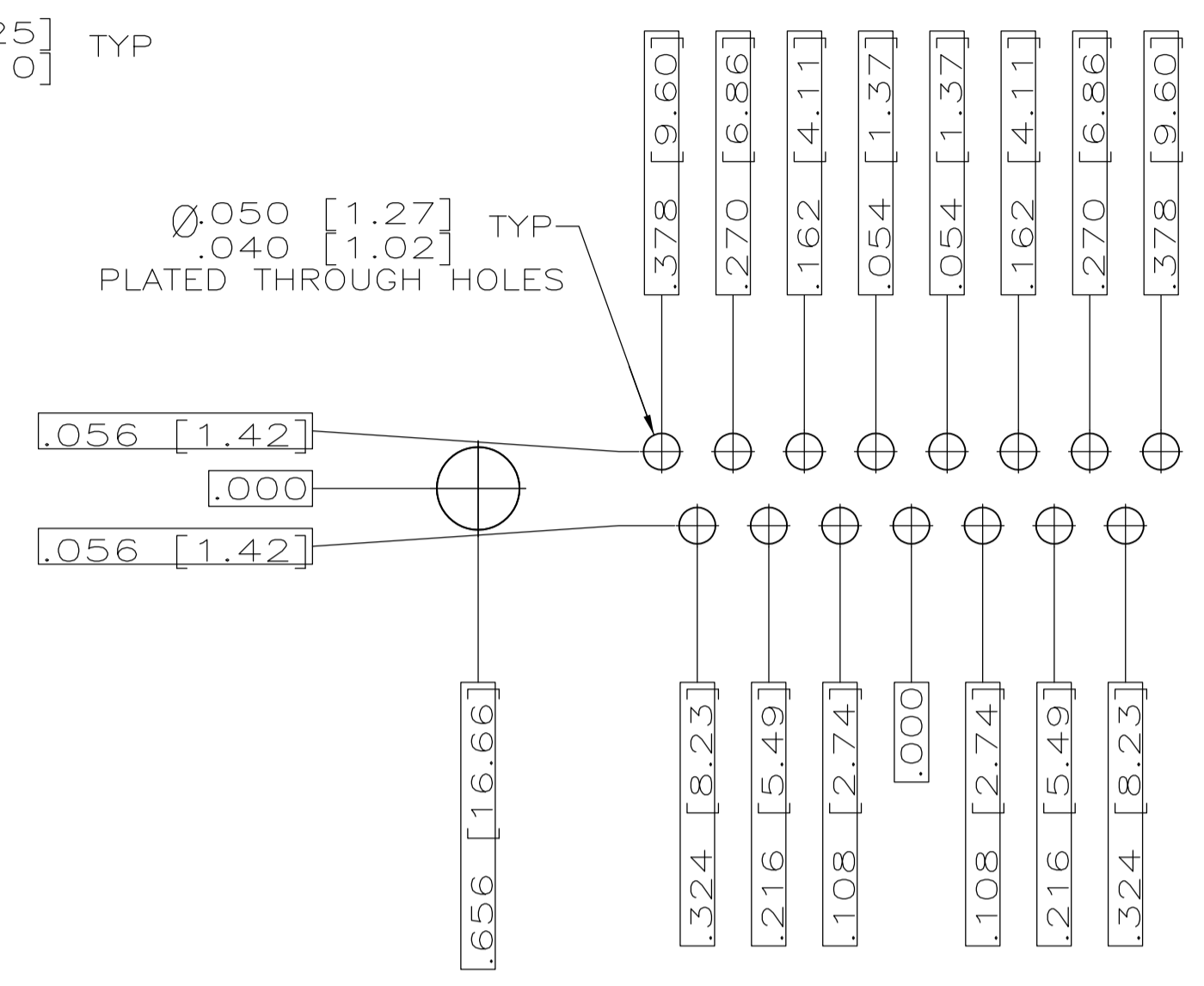
APPLICATION SPEC: —
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 CASE CODE: 00779
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 RESTRICTED TO: —

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 SHEET: 1 OF 2
 REV: C

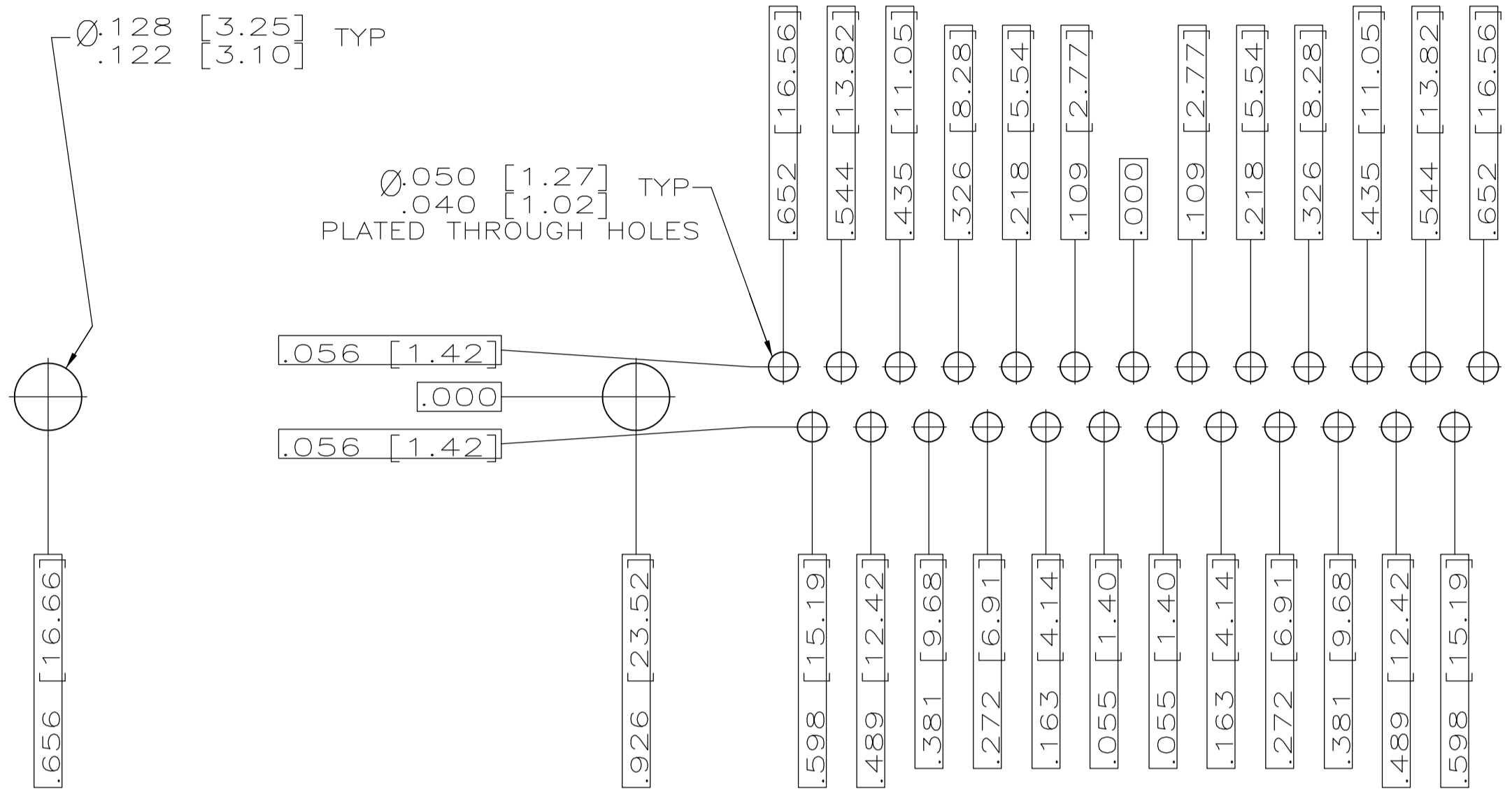
REVISONS		DATE	BY	APPROVED
NO.	DESCRIPTION			
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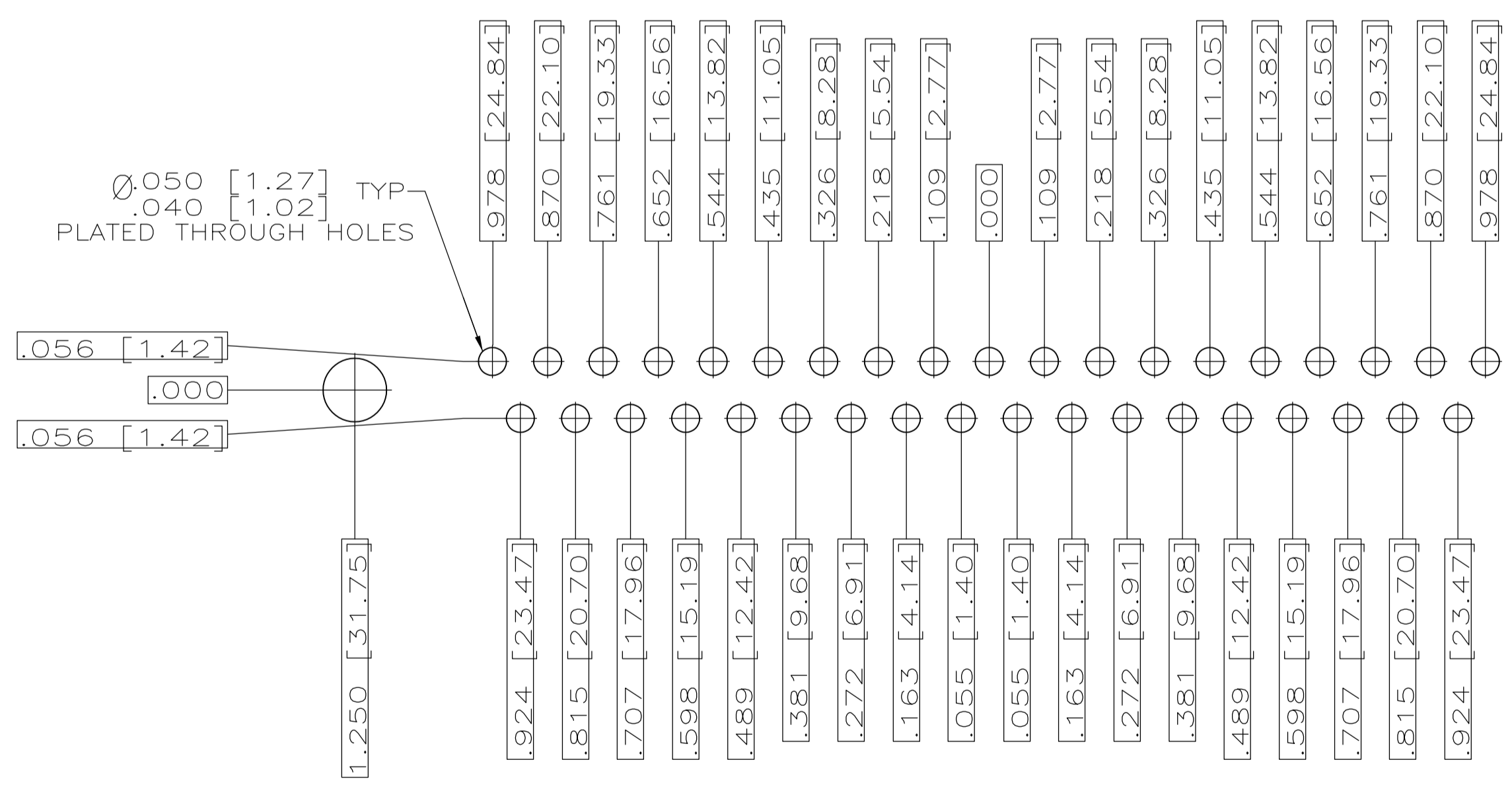
RECOMMENDED P.C. BOARD LAYOUT
SHELL SIZE 1 (9 POSITION) ⚠



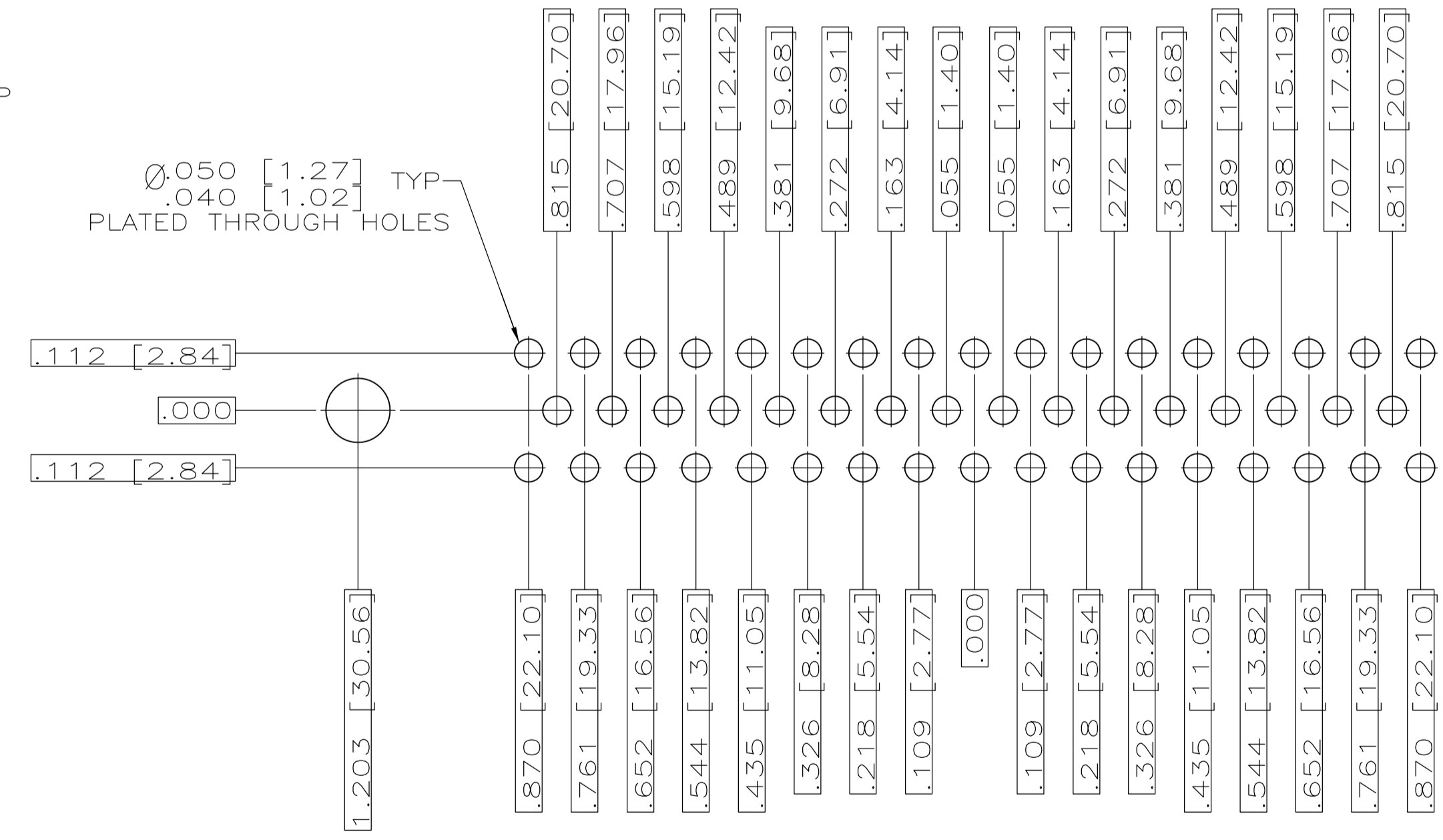
RECOMMENDED P.C. BOARD LAYOUT
SHELL SIZE 2 (15 POSITION) ⚠



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.		DWN: C.C. THOMAS 14OCT99 CHK: D. HOFFMAN 18OCT99 APPR: D. HOFFMAN 18OCT99	Tyco Electronics Corporation Harrisburg, PA 17105-3608
DIMENSIONS: INCHES TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PL ± .005 1 PL ± .005 2 PL ± .005 3 PL ± .005 4 PL ± .005 RINGS ± .005	MATERIAL: SEE CALLOUTS	FINISH: SEE CALLOUTS	NAME: D. HOFFMAN PRODUCT SPEC: APPLICATION SPEC: SIZE: A1 CASE CODE: 00779 DRAWING NO: 1218293 WEIGHT: CUSTOMER DRAWING:
THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION COPYRIGHT BY TYCO ELECTRONICS CORPORATION. ALL RIGHTS RESERVED.		SCALE: 1:1 SHEET: 2 OF 2 REV: C	Tyco Electronics Corporation Harrisburg, PA 17105-3608 AMPLIMITE RECEPTACLE ASSY, LOW PROFILE SIZE 20 POSTED CONTACTS SERIES 109, SIZE 1 THRU 5