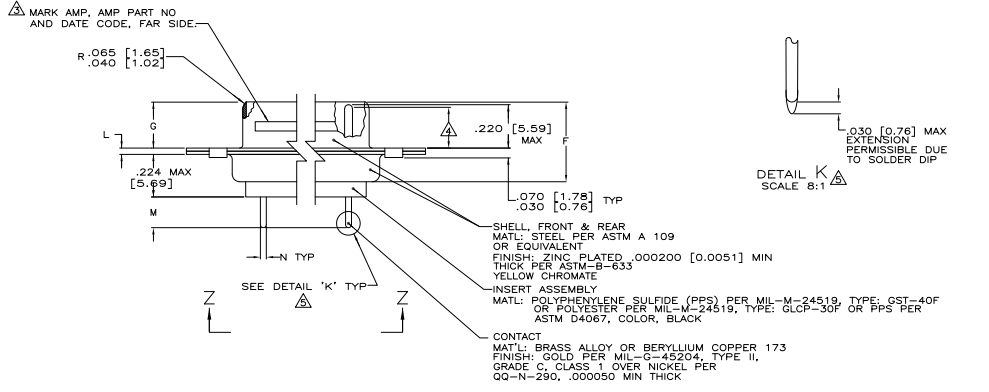
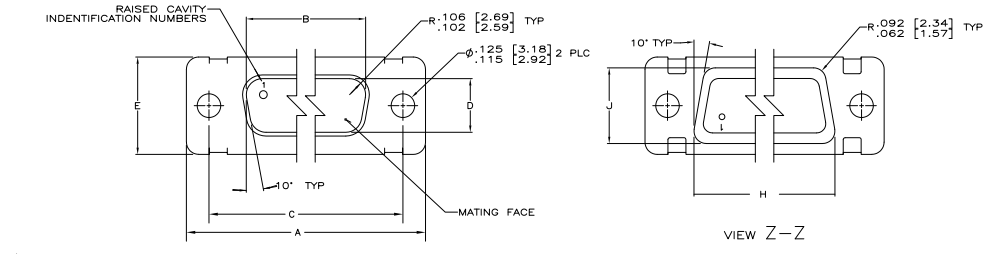
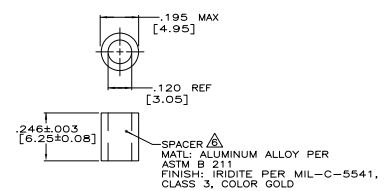


REV	DATE	DESCRIPTION	BY	CHK	APP
1	REV PER ESD-07-07102				



- 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 .094 [2.39]
- THE CONNECTORS DESCRIBED IN THIS DOCUMENT MATE WITH ANY RECEPTACLE CONNECTOR WITH THE SAME INSERT ARRANGEMENT.
- 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 "AMP", AMP PART NUMBER AND DATE CODE, THEN SPLIT AS FOLLOWS:
 A. AMP PART NUMBER ON REAR SHELL, NEAR SIDE.
 B. "AMP" AND DATE CODE ON FRONT SHELL, NEAR SIDE.
- REQUIREMENT FOR FULL PIN DIAMETER EXTENSION:
 .159 [4.04] MIN, SHELL SIZES 1 AND 2.
 .150 [3.81] MIN, SHELL SIZES 3 AND 4.
- 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.
- SPACERS (QTY 2) ARE SUPPLIED WITH CONNECTORS (NOT ATTACHED TO THE CONNECTOR).
- DIMENSIONS APPLY PRIOR TO SOLDER DIPPING.



N	M	L	J	H	G	F	E	D	C	B	A	INSERT ARRANGEMENT	NO OF POS	SHELL SIZE	AMP PN ON CONNECTOR	PART NUMBER
.033 [0.84]	.176 [4.47]	.049 [1.24]	.544 [13.82]	2.188 [55.58]	.236 [5.99]	.436 [11.07]	.620 [15.75]	.448 [11.33]	2.411 [61.24]	2.084 [52.93]	2.650 [67.31]	MS18277-1	50	5	1218378-5	1-1218378-0
.027 [0.69]	.136 [3.45]	.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 [52.68]	2.620 [66.50]	MS18276-1	25	4	1218378-4	1218378-9
.033 [0.84]	.176 [4.47]	.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 [55.50]	2.744 [69.70]	MS18276-1	37	3	1218378-4	1218378-8
.027 [0.69]	.136 [3.45]	.029 [0.74]	.412 [10.46]	2.262 [57.45]	.224 [5.69]	.416 [10.57]	.479 [12.17]	.324 [8.23]	2.496 [63.37]	2.177 [55.30]	2.714 [68.94]	MS18275-1	25	3	1218378-3	1218378-8
.027 [0.69]	.136 [3.45]	.029 [0.74]	.412 [10.46]	1.815 [46.02]	.224 [5.69]	.416 [10.57]	.479 [12.17]	.324 [8.23]	1.847 [46.91]	1.529 [38.84]	2.073 [52.65]	MS18274-1	15	2	1218378-2	1218378-7
.033 [0.84]	.176 [4.47]	.049 [1.24]	.432 [10.97]	1.093 [27.76]	.236 [5.99]	.436 [11.07]	.509 [12.93]	.334 [8.48]	1.317 [33.45]	.989 [25.37]	1.156 [29.52]	MS18273-1	9	1	1218378-1	1218378-6
.027 [0.69]	.136 [3.45]	.029 [0.74]	.412 [10.46]	.749 [19.02]	.229 [5.82]	.412 [10.46]	.479 [12.17]	.324 [8.23]	1.307 [33.20]	.989 [25.12]	1.128 [28.76]	MS18273-1	50	5	1218378-5	1218378-5
.033 [0.84]	.176 [4.47]	.049 [1.24]	.544 [13.82]	2.188 [55.58]	.236 [5.99]	.436 [11.07]	.620 [15.75]	.448 [11.33]	2.411 [61.24]	2.084 [52.93]	2.650 [67.31]	MS18277-1	50	5	1218378-5	1218378-5
.027 [0.69]	.136 [3.45]	.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 [52.68]	2.620 [66.50]	MS18276-1	25	4	1218378-4	1218378-4
.033 [0.84]	.176 [4.47]	.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 [55.50]	2.744 [69.70]	MS18276-1	37	3	1218378-4	1218378-4
.027 [0.69]	.136 [3.45]	.029 [0.74]	.412 [10.46]	1.815 [46.02]	.224 [5.69]	.416 [10.57]	.479 [12.17]	.324 [8.23]	1.847 [46.91]	1.529 [38.84]	2.073 [52.65]	MS18275-1	25	3	1218378-3	1218378-3
.027 [0.69]	.136 [3.45]	.029 [0.74]	.412 [10.46]	1.073 [27.25]	.229 [5.82]	.412 [10.46]	.479 [12.17]	.324 [8.23]	1.307 [33.20]	.989 [25.12]	1.128 [28.76]	MS18274-1	15	2	1218378-2	1218378-2
.033 [0.84]	.176 [4.47]	.049 [1.24]	.432 [10.97]	1.093 [27.76]	.236 [5.99]	.436 [11.07]	.509 [12.93]	.334 [8.48]	1.317 [33.45]	.989 [25.37]	1.156 [29.52]	MS18273-1	9	1	1218378-1	1218378-1
.027 [0.69]	.136 [3.45]	.029 [0.74]	.412 [10.46]	.749 [19.02]	.229 [5.82]	.412 [10.46]	.479 [12.17]	.324 [8.23]	.979 [24.87]	.861 [21.79]	1.128 [28.76]	MS18273-1	9	1	1218378-1	1218378-1

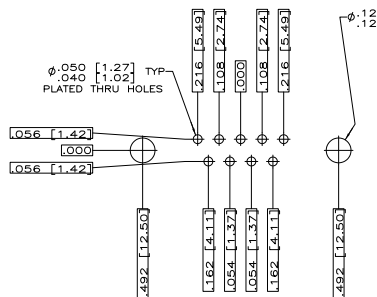
THIS DRAWING IS A CONTROLLED DOCUMENT. THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE.

DATE: 07-10-2008
 BY: TYS Electronics Corporation
 HARRISBURG, PA 17105-3608

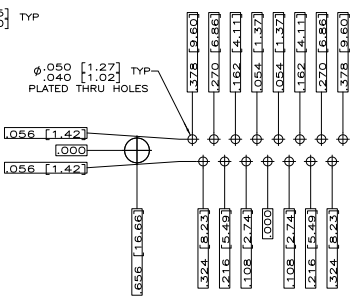
DESCRIPTION: AMP/PLUG ASSY, LOW PROFILE SIZE 20 POSTED PC BOARD CONTACTS (30 DA SHORT POST), SERIES 109

REV: 1
 DATE: 07-10-2008
 BY: TYS Electronics Corporation
 HARRISBURG, PA 17105-3608

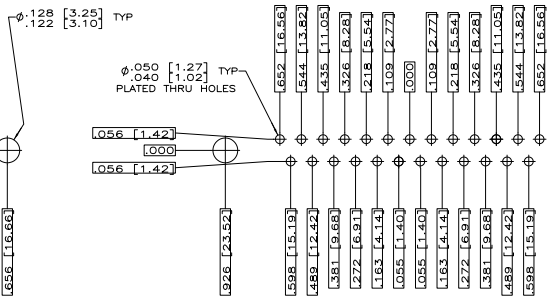
CUSTOMER DRAWING: AMP PN ON CONNECTOR: 1218378



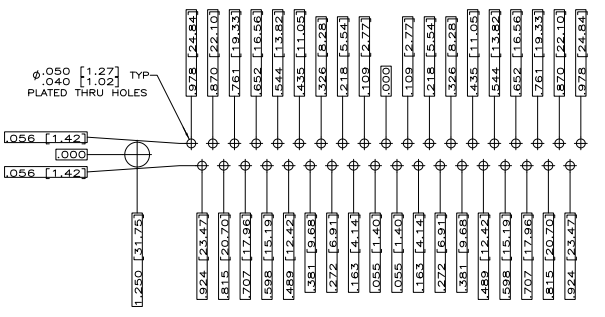
RECOMMENDED P.C. BOARD LAYOUT
SHELL SIZE 1 (9 POSITION) Δ



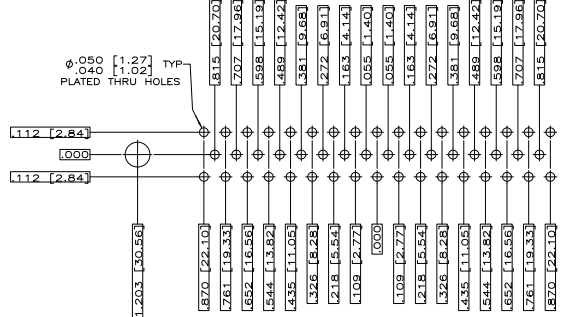
RECOMMENDED P.C. BOARD LAYOUT
SHELL SIZE 2 (15 POSITION) Δ



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



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



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

THIS DRAWING IS A CONTROLLED DOCUMENT.		DATE: 1-15-88	BY: J.C. THOMAS
DESIGNED BY: [Signature]	CHECKED BY: [Signature]	DATE: 1-17-88	BY: [Signature]
		AMP Incorporated Harrisburg, PA 17105-3608	
PRODUCT NAME: AMPULITE PLUG ASSY, LOW PROFILE SIZE: 20 POSTED P.C. BOARD CONTACTS, .030 DIA SHORT POST, SERIES 109,		APPLICATION SPEC: [Blank] SIZE: [Blank]	
ORDER NO: A100779		CUSTOMER DRAWING: 1218378	
SCALE: 4:1		SHEET: 2 OF 2	