

REVISION M

NOTES:

1. $\text{\textcircled{C}}$ REPRESENTS A CRITICAL DIMENSION.
2. MINIMUM PUSHOUT FORCE: 0.75 LBS.
3. PARTS TO BE PACKAGED IN TRAYS (UNLESS -TR OPTION IS SELECTED).
4. 5 ROW SOLDER TAILS ARE NOT SYMMETRICAL WITH BODY WIDTH (.378[9.60]); SEE FIG. 7, SHEET 4.
5. C15 TO BE INSPECTED OPTICALLY WHILE FOCUSED ON THIS SURFACE.
6. DIMENSION TO BE MEASURED IN ALL FOUR CORNERS.

M

DO NOT SCALE FROM THIS PRINT

SEAM-XX-XX.X-XX-XX-X-XX

No OF POSITIONS

-20, -30, -40, -50
(PER ROW)

OPTION

- A: ALIGNMENT PIN (SEE FIG. 3, SHT 2)
- K: KAPTON PAD (HAND PLACE: USE K-850-650) (SEE FIG. 4, SHT 2)
- DOT APPLICATOR-KAPTON TAPE.
- 05/-06 ROW USE K-DOT-.236-.343-.005
- 08 ROW USE K-DOT-.325-.450-.005
- 10 ROW USE K-DOT-.404-.500-.005
- TR: TAPE & REEL
- **GP: GUIDE POST (SEE FIG. 8, SHT 5) (ONLY AVAILABLE WITH 6 ROW 30 POS)
- **04: DIFF PAIR, (SEE FIG. 9, SHT 6) (ONLY AVAILABLE IN 10 ROW, 30 POSITION)
- **08: DIFF PAIR, (SEE FIG. 10, SHT 6) (ONLY AVAILABLE IN 10 ROW, 30 POSITION)
- **12: DIFF PAIR, (SEE FIG. 11, SHT 6) (ONLY AVAILABLE IN 10 ROW, 30 POSITION)
- **16: DIFF PAIR, (SEE FIG. 12, SHT 6) (ONLY AVAILABLE IN 10 ROW, 30 POSITION)

LEAD STYLE

- 02.0 (SEE TABLE 1&2)
- *-03.0(SEE TABLE 1&2)
- 03.5(SEE TABLE 1&2)
- 07.0 (SEE TABLE 9 &10)
- 09.0 (SEE TABLE 9 &10)
- ** -11.0 (SEE TABLE 9 &10)
- *-13.0 (SEE TABLE 9 &10)

PLATING SPECIFICATION

- SM: SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- (LEAD STYLE -02.0 THRU-03.5: USE SUB-T-1M36-XX.X-S-X)
- (LEAD STYLE -07.0 THRU-13.0: USE SUB-T-1M38-XX.X-S-X)
- S: SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- (LEAD STYLE -02.0 THRU-03.5: USE SUB-T-1M36-XX.X-S-X)
- (LEAD STYLE -07.0 THRU-13.0: USE SUB-T-1M38-XX.X-S-X)

SOLDER COMPOSITION & STYLE

- 1: 63% TIN / 37% LEAD CHARGE TAIL (USE SUB-T-1M3X-XX.X-X-1)
- 2: 95.5% TIN / 3.8% SILVER / .7% COPPER CHARGE TAIL (USE SUB-T-1M3X-XX.X-X-2)

ROW

- 05: 5 ROWS (SEE FIG. 7, SHT 4) (-02.0 LEAD STYLE ONLY)
- 06: 6 ROWS (SEE FIG. 6, SHT 4) (-02.0 LEAD STYLE ONLY) (-20 & -30 POS ONLY)
- 08: 8 ROWS (SEE FIG. 1)
- 10: 10 ROWS (SEE FIG. 2, SHT 2)

* = NOT TOOLED
** = NOT RELEASED FOR PRODUCTION

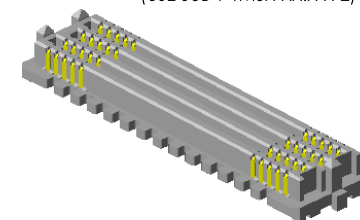
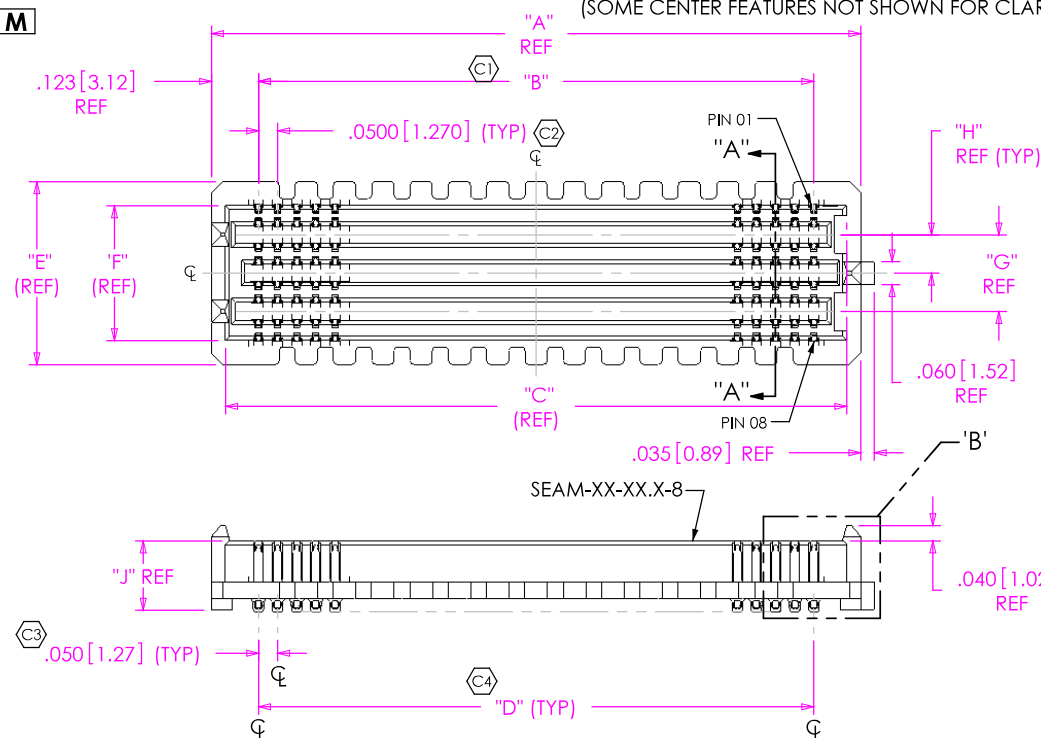


FIG. 1

-08: 8 ROW
(SEAM-30-02.0-XX-08-1 SHOWN)
(SOME CENTER FEATURES NOT SHOWN FOR CLARITY)

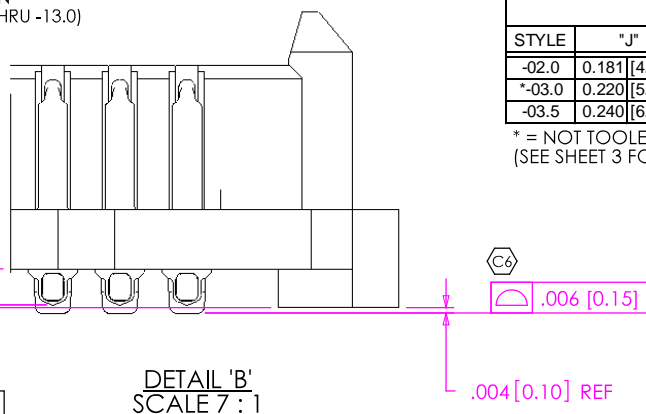


| TABLE 2 | | | |
|-----------------|-----------------|-------|-------|
| STACK HEIGHT | | | |
| SEAM LEAD STYLE | SEAF LEAD STYLE | | |
| STYLE | -05.0 | -06.0 | -06.5 |
| -02.0 | 7mm | 8mm | 8.5mm |
| *-03.0 | 8mm | 9mm | 9.5mm |
| -03.5 | 8.5mm | 9.5mm | 10mm |

* = NOT TOOLED
** = NOT RELEASED FOR PRODUCTION
(SEE SHEET 3 FOR LEAD STYLES -07.0 THRU -13.0)

| TABLE 11 | |
|--------------------------------|---------------|
| LEAD STYLE | "T" |
| -02.0 | .0270 [0.686] |
| *-03.0 | .0660 [1.676] |
| -03.5 | .0860 [2.184] |
| -07.0, -09.0, ** -11.0, *-13.0 | .0430 [1.092] |

M



| TABLE 1 | | | |
|---------|--------------|-------------------|---------------------|
| STYLE | "J" | BODY CALLOUT | TERMINAL |
| -02.0 | 0.181 [4.60] | SEAM-XX-02.0-XX-X | SUB-T-1M36-02.0-X-X |
| *-03.0 | 0.220 [5.59] | SEAM-XX-03.0-XX-X | SUB-T-1M36-03.0-X-X |
| -03.5 | 0.240 [6.10] | SEAM-XX-03.5-XX-X | SUB-T-1M36-03.5-X-X |

* = NOT TOOLED
(SEE SHEET 3 FOR LEAD STYLES -07.0 THRU -13.0)

| TABLE 3 | | | | |
|------------|---------------|---------------|---------------|---------------|
| No. OF POS | "A" | "B" | "C" | "D" |
| -20 | 1.196 [30.38] | .950 [24.13] | 1.122 [28.50] | .950 [24.13] |
| -30 | 1.696 [43.08] | 1.450 [36.83] | 1.622 [41.20] | 1.450 [36.83] |
| -40 | 2.196 [55.78] | 1.950 [49.53] | 2.122 [53.90] | 1.950 [49.53] |
| -50 | 2.696 [68.48] | 2.450 [62.23] | 2.622 [66.60] | 2.450 [62.23] |

| TABLE 4 | | | | |
|-------------|--------------|--------------|-------------|-------------|
| No. OF ROWS | "E" | "F" | "G" | "H" |
| -05, -06 | .378 [9.60] | .252 [6.40] | .100 [2.54] | .050 [1.27] |
| -08 | .478 [12.14] | .352 [8.94] | .200 [5.08] | .100 [2.54] |
| -10 | .578 [14.68] | .452 [11.48] | .300 [7.62] | .150 [3.81] |

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

TOLERANCES ARE:

DECIMALS ANGLES
.XX: ± 0.01 [.3]
.XXX: ± 0.005 [.13]
.XXXX: ± 0.0020 [.051]

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MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2:1
INSULATOR: L.C.P., COLOR: BLACK
TERMINAL: COPPER ALLOY



520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 53322

DESCRIPTION:
.050 PITCH TERMINAL ARRAY ASSEMBLY
DWG. NO.

SEAM-XX-XX.X-XX-XX-X-XX

BY: BRATCHER 06/02/2004 SHEET 1 OF 6

FIG. 2
 -10: 10 ROW
 (SAME AS FIG. 1, EXCEPT AS SHOWN)
 (SEAM-30-02.0-XX-10-1 SHOWN)
 (SOME CENTER FEATURES NOT SHOWN FOR CLARITY)

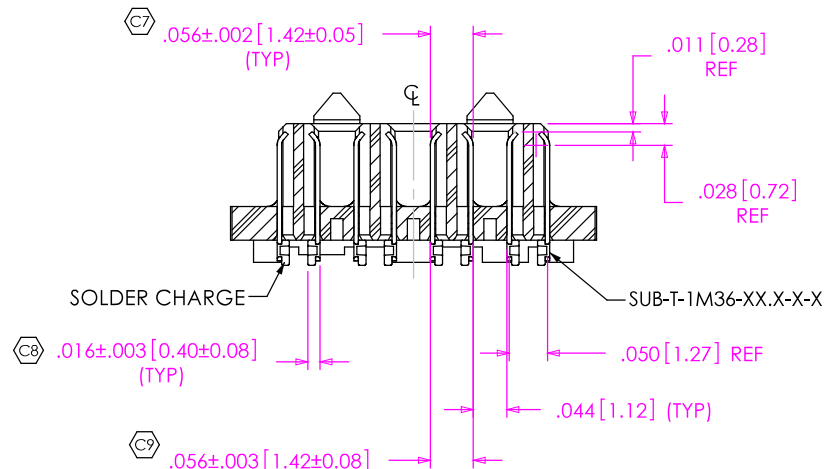
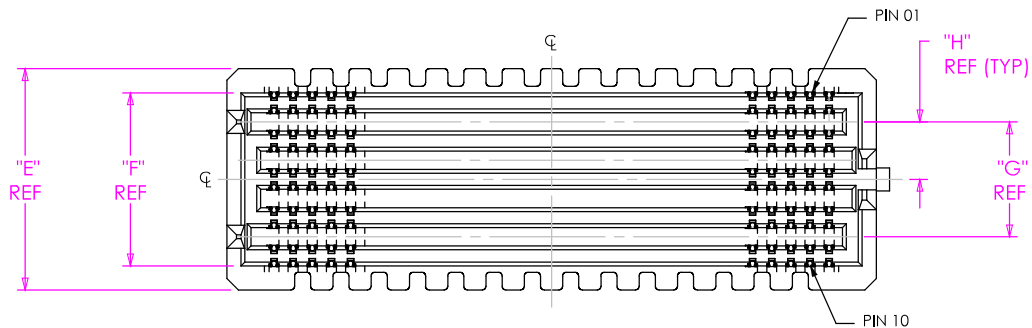


FIG. 4
 -K: KAPTON PAD OPTION
 (SEAM-30-02.0-XX-08-1-K SHOWN)
 (SAME AS FIG. 1, EXCEPT AS SHOWN)
 (ALL CONTACTS NOT SHOWN FOR CLARITY)

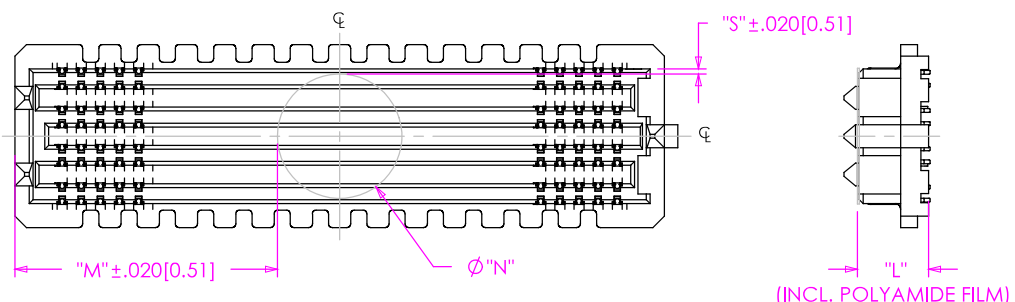


FIG. 3
 -A: ALIGNMENT PINS OPTION
 APPLIES TO ALL -A OPTION PART NUMBERS
 (SAME AS FIG. 1, EXCEPT AS SHOWN)
 (SEAM-30-02.0-XX-08-1-A SHOWN)
 (SOME CONTACTS NOT SHOWN FOR CLARITY)

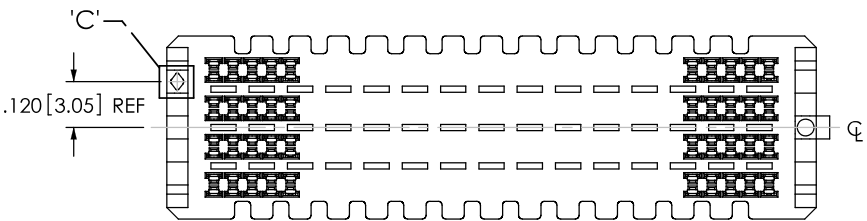
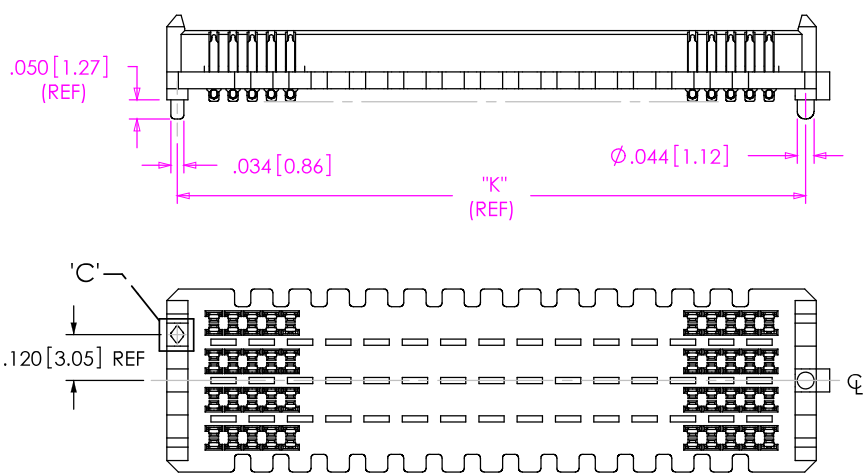


TABLE 7

| No. OF POS | -05 "M" | -06 "M" | -08 "M" | -10 "M" |
|------------|---------------|--------------|---------------|---------------|
| -20 | .480 [12.19] | .480 [12.19] | .435 [11.05] | .396 [10.06] |
| -30 | .730 [18.54] | .730 [18.54] | .685 [17.40] | .646 [16.41] |
| -40 | .980 [24.89] | N/A | .935 [23.75] | .896 [22.76] |
| -50 | 1.230 [31.24] | N/A | 1.185 [30.10] | 1.146 [29.11] |

TABLE 8

| No. OF ROWS | Ø "N" | "S" |
|-------------|--------------|-------------|
| -05, -06 | .236 [6.00] | .008 [0.20] |
| -08 | .325 [8.25] | .014 [0.34] |
| -10 | .404 [10.25] | .024 [0.61] |

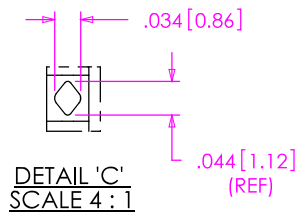
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TABLE 6

| LEAD STYLE | "L" |
|------------|--------------|
| -02.0 | .186 [4.72] |
| *-03.0 | .225 [5.72] |
| -03.5 | .245 [6.22] |
| -07.0 | .382 [9.70] |
| -09.0 | .461 [11.71] |
| ** -11.0 | .540 [13.72] |
| *-13.0 | .619 [15.72] |

TABLE 5

| No. OF POS | "K" |
|------------|---------------|
| -20 | 1.141 [29.98] |
| -30 | 1.641 [41.68] |
| -40 | 2.141 [54.38] |
| -50 | 2.641 [67.08] |



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 e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:
 .050 PITCH TERMINAL ARRAY ASSEMBLY
 DWG. NO.
SEAM-XX-XX.X-XX-XX-X-XX
 BY: BRATCHER 06/02/2004 SHEET 2 OF 6

FIG. 5

-07.0 THRU -13.0 LEAD STYLES
(SAME AS FIG. 1, EXCEPT AS SHOWN)
(SEAM-30-09.0-XX-08-X-X SHOWN)
(SOME CENTER FEATURES NOT SHOWN FOR CLARITY)

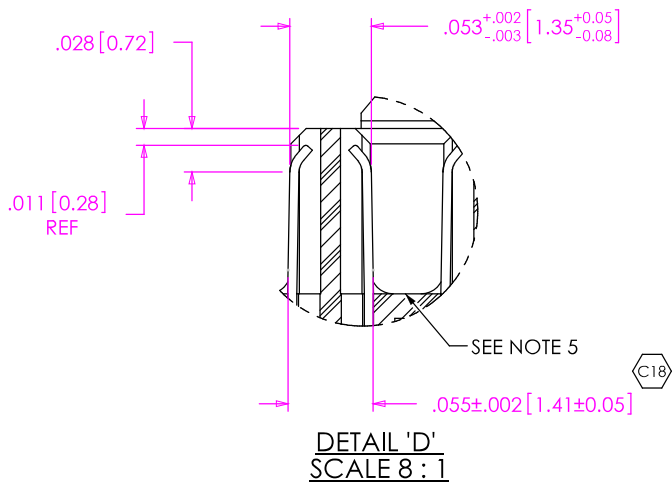
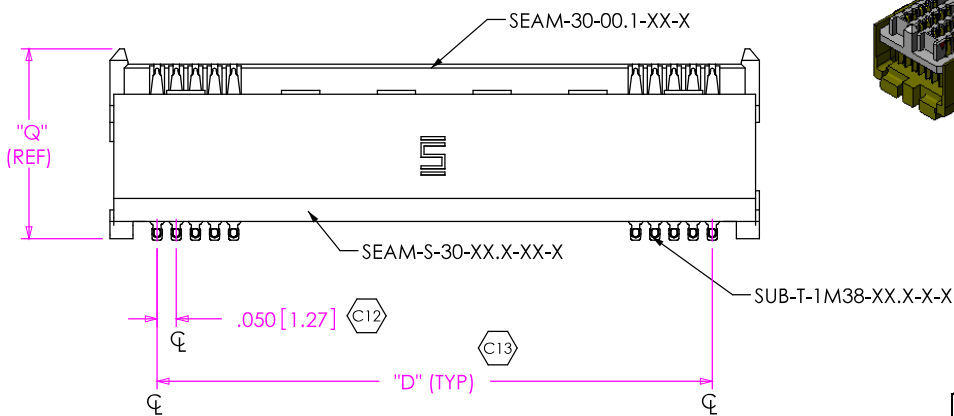
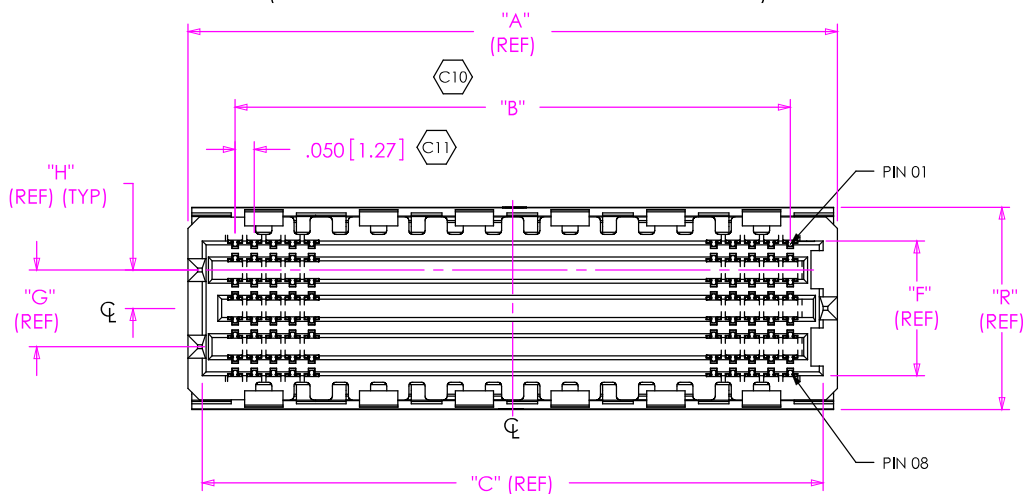


TABLE 9
STACK HEIGHT

| SEAM-S LEAD STYLE | SEAF LEAD STYLE | | |
|-------------------|-----------------|----------|--------|
| | -05.0 | **-.06.0 | -06.5 |
| -07.0 | 12mm | 13mm | 13.5mm |
| -09.0 | 14mm | 15mm | 15.5mm |
| **-.11.0 | 16mm | 17mm | 17.5mm |
| *-13.0 | 18mm | 19mm | 19.5mm |

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F:\DWG\MISC\MKTG\SEAM-XX-XX.X-XX-XX-X-MKT.SLDDRW

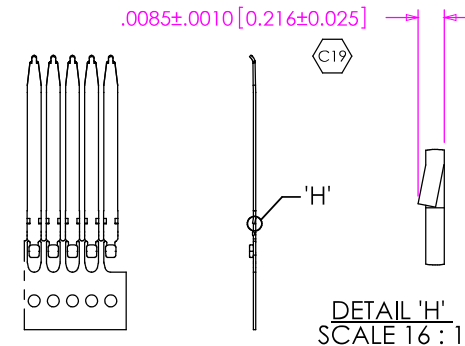
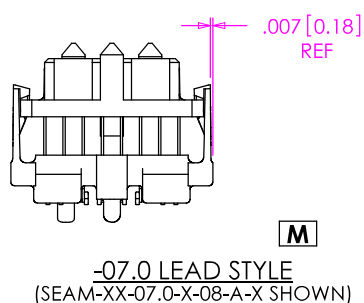
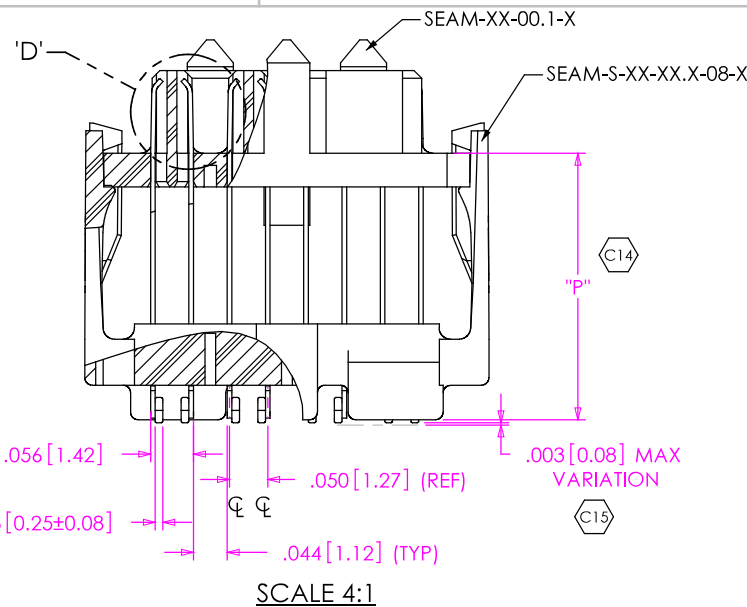
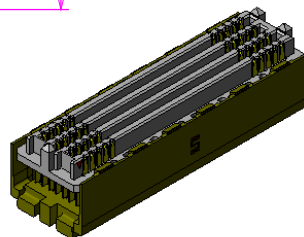


FIG. 13
(IN-PROCESS VIEW)



SCALE 4:1

TABLE 10

| ROW | STYLE | "P" | "Q" | "R" | SPACER BODY | TOP BODY | TERMINAL |
|-----|----------|--------------|--------------|--------------|---------------------|-----------------|---------------------|
| -08 | -07.0 | .271 [6.88] | .417 [10.60] | .528 [13.41] | SEAM-S-XX-07.0-08-X | SEAM-XX-00.1-08 | SUB-T-1M38-07.0-X-X |
| | -09.0 | .350 [8.89] | .496 [12.60] | .528 [13.41] | SEAM-S-XX-09.0-08-X | SEAM-XX-00.1-08 | SUB-T-1M38-09.0-X-X |
| | **-.11.0 | .429 [10.90] | .575 [14.60] | .528 [13.41] | SEAM-S-XX-11.0-08-X | SEAM-XX-00.1-08 | SUB-T-1M38-11.0-X-X |
| | *-13.0 | .508 [12.90] | .654 [16.60] | .528 [13.41] | SEAM-S-XX-13.0-08-X | SEAM-XX-00.1-08 | SUB-T-1M38-13.0-X-X |
| -10 | -07.0 | .271 [6.88] | .417 [10.60] | .628 [15.95] | SEAM-S-XX-07.0-10-X | SEAM-XX-00.1-10 | SUB-T-1M38-07.0-X-X |
| | -09.0 | .350 [8.89] | .496 [12.60] | .628 [15.95] | SEAM-S-XX-09.0-10-X | SEAM-XX-00.1-10 | SUB-T-1M38-09.0-X-X |
| | **-.11.0 | .429 [10.90] | .575 [14.60] | .628 [15.95] | SEAM-S-XX-11.0-10-X | SEAM-XX-00.1-10 | SUB-T-1M38-11.0-X-X |
| | *-13.0 | .508 [12.90] | .654 [16.60] | .628 [15.95] | SEAM-S-XX-13.0-10-X | SEAM-XX-00.1-10 | SUB-T-1M38-13.0-X-X |

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DESCRIPTION:
.050 PITCH TERMINAL ARRAY ASSEMBLY

DWG. NO.:
SEAM-XX-XX.X-XX-XX-X-XX

BY: BRATCHER 06/02/2004 SHEET 3 OF 6

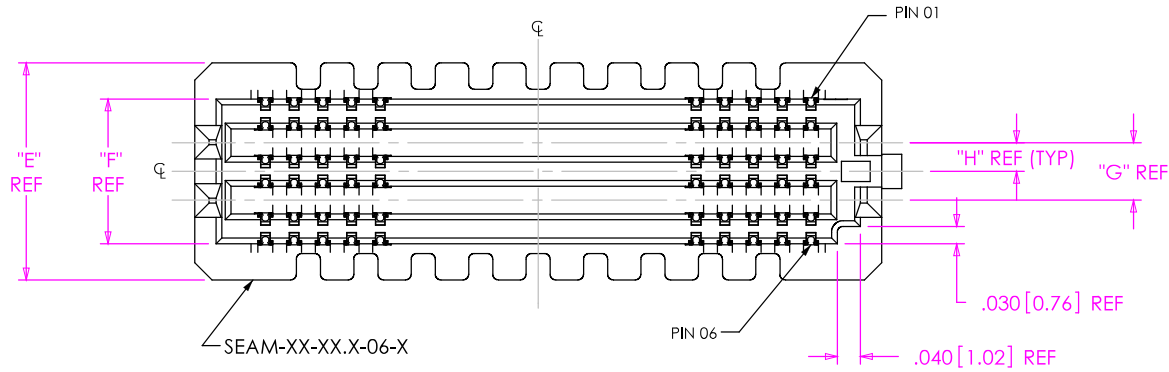


FIG. 6
 -06: 6 ROWS
 (SAME AS FIG. 1, EXCEPT AS SHOWN)
 (SEAM-20-02.0-XX-06-X-A SHOWN)
 (-02.0 LEAD STYLE ONLY) (-20 & -30 POS ONLY)
 (SOME CENTER FEATURES NOT SHOWN FOR CLARITY)

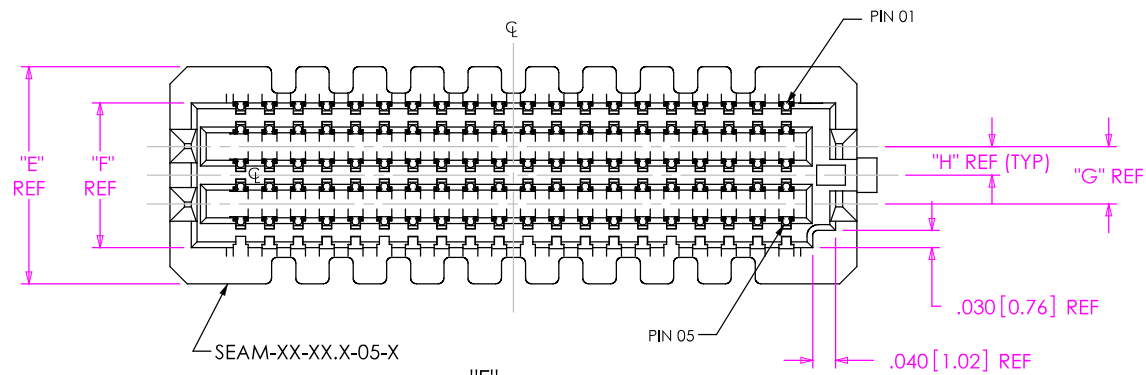
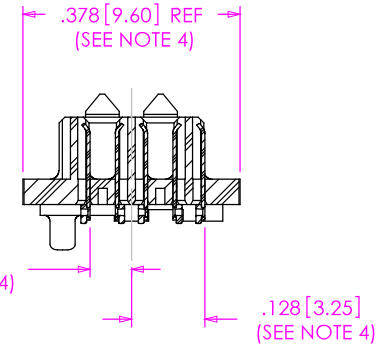
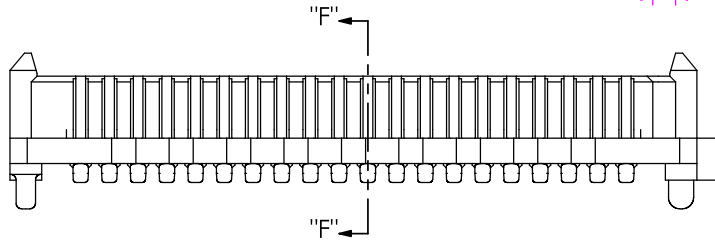
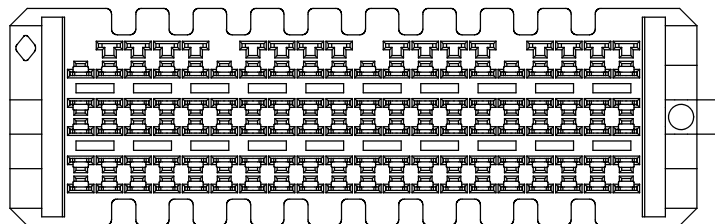


FIG. 7
 -05: 5 ROWS
 (SAME AS FIG. 6, EXCEPT AS SHOWN)
 (SEAM-20-02.0-XX-05-X-A SHOWN)
 (-02.0 LEAD STYLE ONLY)
 (SEE NOTE 4)



SECTION "F"-"F"



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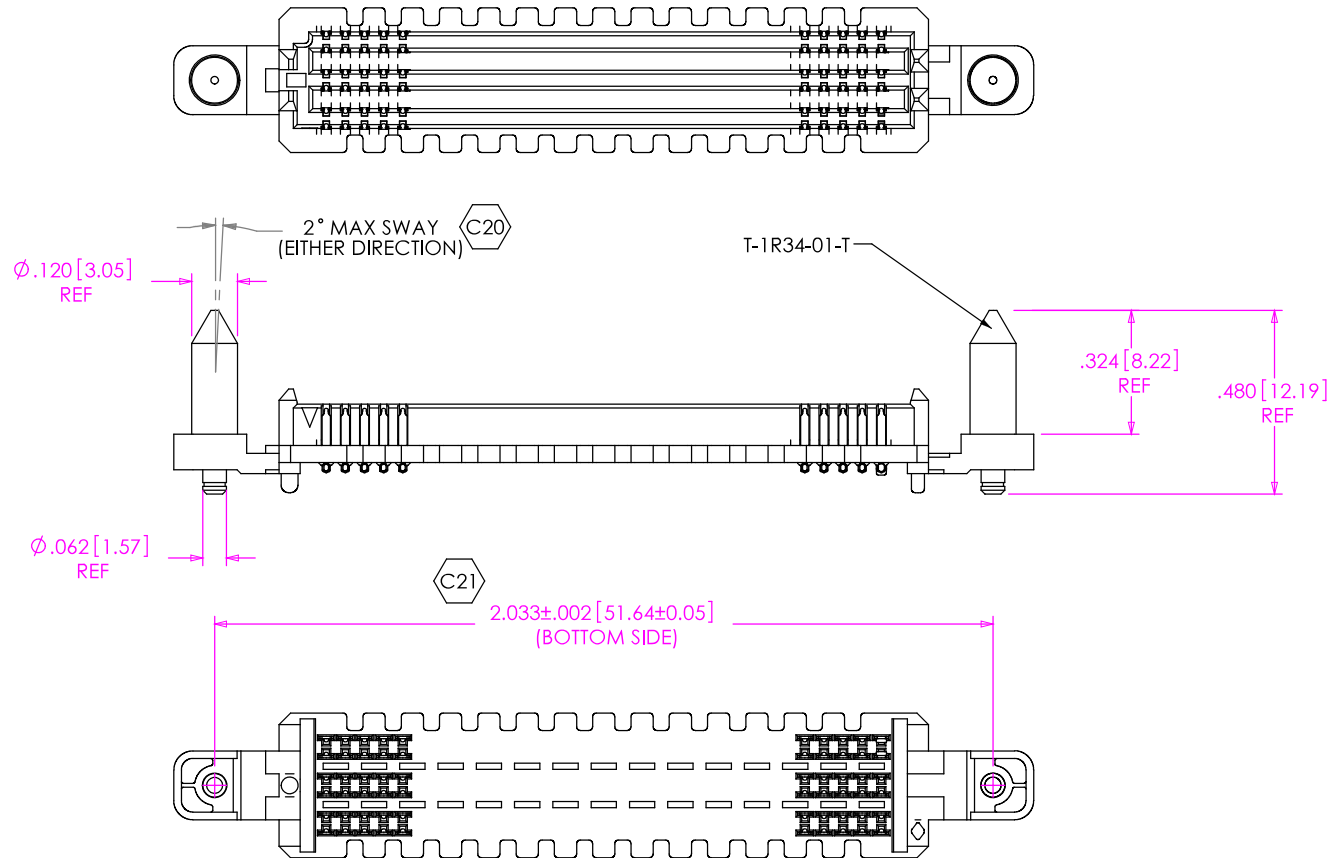
520 PARK EAST BLVD, NEW ALBANY, IN 47150
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DESCRIPTION:
 .050 PITCH TERMINAL ARRAY ASSEMBLY

DWG. NO.
SEAM-XX-XX.X-XX-XX-X-XX

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FIG. 8
 -GP: GUIDE POST OPTION
 APPLIES TO ALL -GP OPTION PART NUMBERS
 (SAME AS FIG. 1, EXCEPT AS SHOWN)
 (SEAM-30-02.0-XX-06-2-A-GP SHOWN)
 (SOME CONTACTS NOT SHOWN FOR CLARITY)




| | |
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| | <p>DESCRIPTION: .050 PITCH TERMINAL ARRAY ASSEMBLY</p> |
| | <p>DWG. NO. SEAM-XX-XX.X-XX-XX-X-XX</p> |
| <p>BY: BRATCHER 06/02/2004 SHEET 5 OF 6</p> | |

FIG. 9
 -10: 10 ROW
 (SEAM-30-02.0-XX-10-2-04 SHOWN)
PINS OMITTED 12, 13, 16, 17, 24, 25, 28 & 29

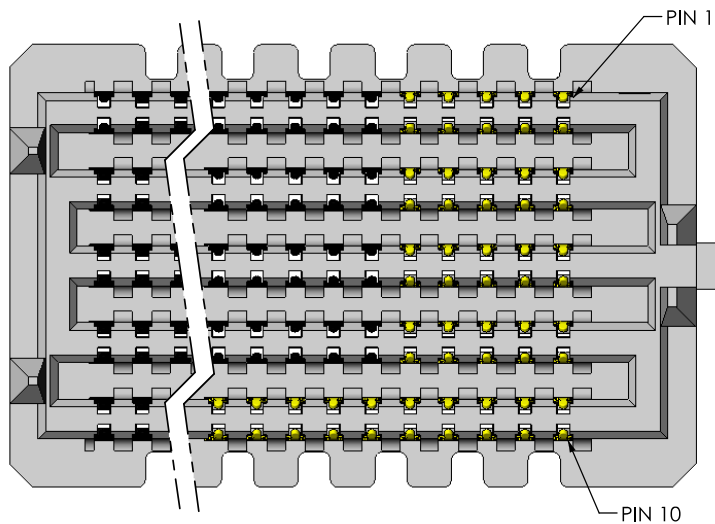


FIG. 10
 -10: 10 ROW
 (SEAM-30-02.0-XX-10-2-08 SHOWN)
PINS OMITTED 12, 13, 16, 17, 24, 25, 28, 29, 32, 33, 36, 37, 44, 45, 48 & 49

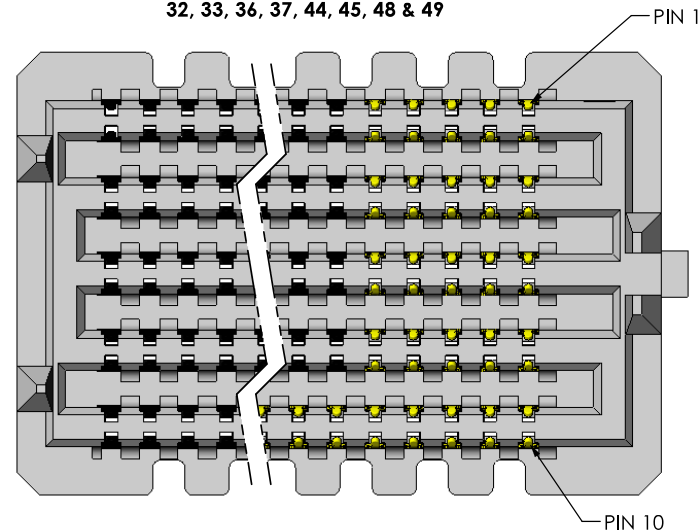


FIG. 11
 -10: 10 ROW
 (SEAM-30-02.0-XX-10-2-12 SHOWN)
PINS OMITTED 12, 13, 16, 17, 24, 25, 28, 29, 32, 33, 36, 37, 44, 45, 48, 49, 52, 53, 56, 57, 64, 65, 68 & 69

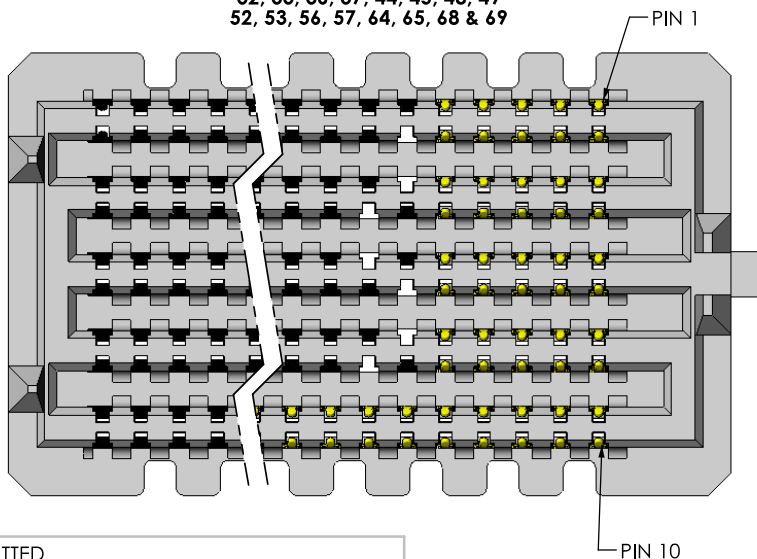
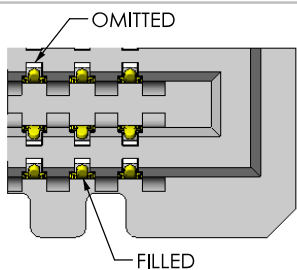
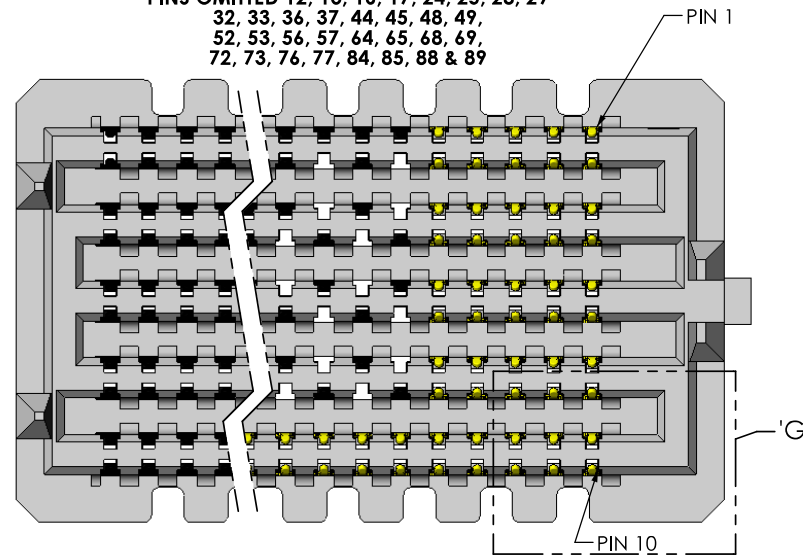


FIG. 12
 -10: 10 ROW
 (SEAM-30-02.0-XX-10-2-16 SHOWN)
PINS OMITTED 12, 13, 16, 17, 24, 25, 28, 29, 32, 33, 36, 37, 44, 45, 48, 49, 52, 53, 56, 57, 64, 65, 68, 69, 72, 73, 76, 77, 84, 85, 88 & 89



DETAIL 'G'
 SCALE 5 : 1

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SHEET SCALE: 4:1



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BY: BRATCHER 06/02/2004 SHEET 6 OF 6