

Technical drawing of a 3-pin connector assembly. The drawing shows a side view of the connector with three pins. Dimensions and tolerances are provided in inches and millimeters (in [mm]).

- Overall length: "A" REF
- Pin length: .156 [3.96] REF
- Pin diameter: .033 [0.84] REF
- Pin pitch: "C" SPCS. @ .0500 = "D"
- Pin diameter: .0500 [1.270] (TYP)
- Pin diameter: .033 [0.84] REF
- Pin diameter: .361 [9.17] REF
- Pin diameter: .423 [10.74] REF
- Pin diameter: .200 [5.08] REF
- Pin diameter: .08
- Pin diameter: .01
- Pin diameter: "A"
- Pin diameter: "B" REF
- SEE NOTE 17

\*\*\* LEAD STYLE —  
 -05.0: .199[5.05] HEIGHT  
 -06.0: .238[6.05] HEIGHT  
 -06.5: .258[6.55] HEIGHT  
 -07.5: .297[7.54] HEIGHT  
 (SEE TABLE 1)

-S: SELECTIVE GOLD (30µ") IN CONTACT AREA,  
MATTE TIN ON TAIL (USE NEW-SUB-C-209-XX.X-S-X)

-L: LIGHT GOLD (10µ") IN CONTACT AREA,  
MATTE TIN ON TAIL (USE NEW-SUB-C-209-XX.X-L-X)

-SM: SELECTIVE GOLD (30µ") IN CONTACT AREA,  
MATTE TIN ON TAIL (USE NEW-SUB-C-209-XX.X-S-X)

-04: 4 ROWS (SEE SHT 5, FIG 11)  
 -05: 5 ROWS (SEE SHT 3, FIG 5) (SEE NOTE 18)  
 -06: 6 ROWS (SEE SHT 3, FIG 4)  
 -08: 8 ROWS (SEE SHT 1, FIG 1)  
 -10: 10 ROWS (SEE SHT 2, FIG 2)

\* = NOT TOOLED  
 □ = 10 POSITION ONLY AVAILABLE IN 4 ROW.  
 ☒ = ONLY AVAILABLE WITH -05.0 BODY HEIGHT, -10 ROW.  
 ▽ = ONLY AVAILABLE WITH -05.0 AND -06.5 BODY HEIGHT AND 4 ROW.  
 \*\* = ONLY AVAILABLE WITH -06.5 BODY HEIGHT, AND -06 ROW.  
 \*\*\* = ONLY AVAILABLE WITH 30 POS & 4 ROW.  
 \*\*\*\* = ONLY AVAILABLE WITH -05.0 BODY HEIGHT, -04, -06, -08 & -10 ROW.  
 \*\*\*\*\* = NOT RELEASED FOR PRODUCTION.

\*\*\*\*-LP: LATCH POST OPTION  
(SEE SHT 4, FIG 8)  
(ONLY AVAILABLE WITH -05.0  
LEAD STYLE, -04, -06, -08 & -10 ROW)  
(-K OPTION NOT AVAILABLE ON -10  
OR -15 POSITION)

\*\*\*\*\*-RP: RETENTION PIN  
(SEE SHT 4, FIG 9)  
(ONLY AVAILABLE WITH -05.0  
LEAD STYLE, 6, 8 & 10 ROWS)

-PP: POLARIZATION PIN  
(SEE SHT 4, FIG 10)  
(ONLY AVAILABLE WITH -05.0  
LEAD STYLE, 6, 8 & 10 ROWS)

SOLDER COMPOSITION & STYLE 

-1: 63% TIN / 37% LEAD  
**CHARGE TAIL**  
(USE NEW-SUB-C-209-XX.X-X-1)  
-2: 95.5% TIN/3.8% SILVER/.7%  
**COPPER CHARGE TAIL**  
(USE NEW-SUB-C-209-XX.X-X-2)

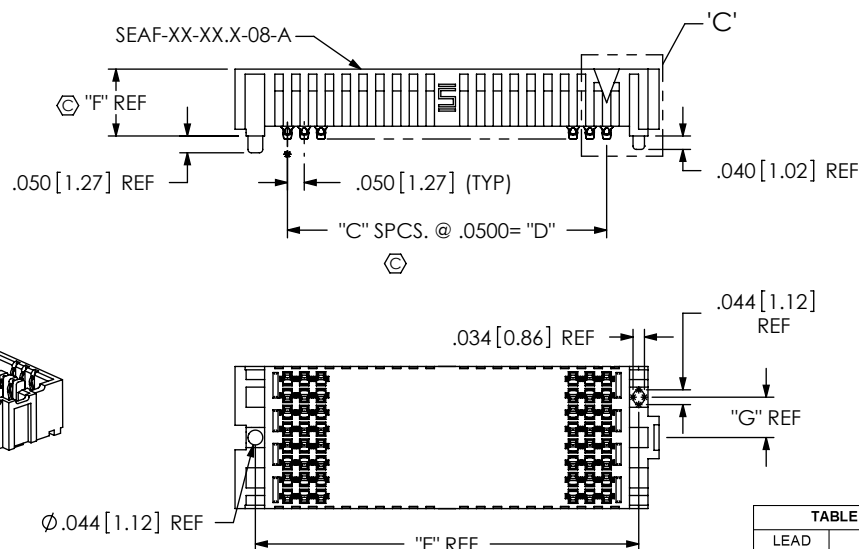


FIG 1  
-08:8 ROW  
(SEAF-20-05.0-XX-08-1-A-XX-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

| LEAD<br>STYLE | "F"  |        |
|---------------|------|--------|
| -05.0         | .199 | [5.05] |
| -06.0         | .238 | [6.05] |
| -06.5         | .258 | [6.55] |
| ***-07.5      | .297 | [7.54] |


| No OF ROWS | "G"  |       |
|------------|------|-------|
| -04        | .079 | [2.01 |
| -05        | .120 | [3.05 |
| -06        | .120 | [3.05 |
| -08        | .120 | [3.05 |
| -10        | .120 | [3.05 |

| TABLE 4    |                   |                        |
|------------|-------------------|------------------------|
| LEAD STYLE | BODY CALLOUT      | CONTACT                |
|            |                   | SOLDER CHARGE TAIL     |
| -05.0      | SEAF-XX.05.0-XX-X | NEW-SUB-C-209-05.0-X-X |
| -06.0      | SEAF-XX.06.0-XX-X | NEW-SUB-C-209-06.0-X-X |
| -06.5      | SEAF-XX.06.5-XX-X | NEW-SUB-C-209-06.5-X-X |
| ***-07.5   | SEAF-XX.07.5-XX-X | NEW-SUB-C-209-07.5-X-X |

| No Of POS.                              | "A"           | "B"           | "C" | "D"             | "E"             |
|---|---------------|---------------|-----|-----------------|-----------------|
| <input checked="" type="checkbox"/> -10 | .729 [18.52]  | .670 [17.02]  | 9   | .4500 [11.430]  | .6410 [16.281]  |
| <input type="checkbox"/> -15            | .979 [24.87]  | .920 [23.37]  | 14  | .7000 [17.780]  | .8910 [22.631]  |
| --19                                    | 1.179 [29.95] | 1.120 [28.45] | 18  | .9000 [22.860]  | 1.0910 [27.711] |
| -20                                     | 1.229 [31.22] | 1.170 [29.72] | 19  | .9500 [24.130]  | 1.1410 [28.981] |
| <input type="checkbox"/> -25            | 1.479 [37.57] | 1.420 [36.07] | 24  | 1.2000 [30.480] | 1.3910 [35.331] |
| -30                                     | 1.729 [43.92] | 1.670 [42.42] | 29  | 1.4500 [36.830] | 1.6410 [41.681] |
| -40                                     | 2.229 [56.62] | 2.170 [55.12] | 39  | 1.9500 [49.530] | 2.1410 [54.381] |
| -50                                     | 2.729 [69.32] | 2.670 [67.82] | 49  | 2.4500 [62.230] | 2.6410 [67.081] |

| SEAF LEAD<br>STYLE | SEAM LEAD STYLE |        |       |        |        |        |        |        |        |
|--------------------|-----------------|--------|-------|--------|--------|--------|--------|--------|--------|
|                    | -02.0           | -03.0  | -03.5 | -06.5  | -07.0  | -09.0  | -11.0  | -13.0  | -15.0  |
| -05.0              | 7mm             | 8mm    | 8.5mm | 11.5mm | 12mm   | 14mm   | 16mm   | 18mm   | 20.5mm |
| -06.0              | 8mm             | 9mm    | 9.5mm | 12.5mm | 13mm   | 15mm   | 17mm   | 19mm   | 21mm   |
| -06.5              | 8.5mm           | 9.5mm  | 10mm  | 13mm   | 13.5mm | 15.5mm | 17.5mm | 19.5mm | 21.5mm |
| ***-07.5           | 9.5mm           | 10.5mm | 11mm  | 14mm   | 14.5mm | 16.5mm | 18.5mm | 20.5mm | 22.5mm |

(\*\*\*= NOT TOOLED)

1.  REPRESENTS A CRITICAL DIMENSION.
2. MINIMUM PUSHOUT FORCE: 0.50 LBS.
3. NOTE DELETED.
4. 5 ROW SOLDER TAILS ARE NOT SYMMETRICAL WITH BODY WIDTH - DIM .321 [8.15], (SEE SHEET 3, FIG. 5).
5. WHEN APPLICABLE, DIMENSION C12 MUST BE MEASURED USING INSPECTION FIXTURE AT-1817-836-1 FOR -04 ROW, OR AT-1817-836-2 FOR -06, -08 & -10 ROW. USE CO-AU-WI-2003-M FOR PROCESS.
6. WITHOUT -A AVAILABLE FOR EXISTING CUSTOMERS ONLY AS OF REVISION Y.
7. K-DOT WILL BE SUPPLIED WHETHER OR NOT -K IS SPECIFIED.
8. TAPE & REEL WILL BE SUPPLIED WHETHER OR NOT -TR IS SPECIFIED.
9. FOR QUANTITIES UP TO 49 PIECES, NO LEADER, TRAILER, OR REEL WILL BE SUPPLIED.  
FOR QUANTITIES OF 50 - 124 PIECES, NO LEADER OR TRAILER WILL BE SUPPLIED.  
SPLICES MAY BE PRESENT.
10. ATTACH LABEL "SEAX-0001" TO EACH TAPE & REEL PACKAGE.
11. SOLDER CHARGE VOLUME IS .00000891 CUBIC INCHES (REF).
12. FOR VITA REQUIREMENTS, -A PIN SHOULD NOT BE ORDERED.
13. SLOT ORIENTATION MUST BE AS SHOWN.
14. A-PINS STANDARD ON ALL BODIES, EXCEPT 6 x 19, SEE SHEET 1, FIG. 1  
A-PIN AS OPTIONAL ON 6 x 19, SEE SHEET 4, FIG. 1
15. MAXIMUM ROW TO ROW VARIATION .003[0.08], MEASURED FIRST & LAST POSITIONS ONLY, ALL ROWS.
16. NOTE DELETED.
17. NON-FUNCTIONAL VOIDING IN PLASTIC BODY TO BE AT SAMTEC'S DISCRETION.
18. THESE OPTIONS AVAILABLE AS ASO (APPLICATION SPECIFIC OPTIONS) ONLY. PLEASE CONTACT SAMTEC FOR MORE INFORMATION.

| DECIMALS                  | ANGLES |
|---------------------------|--------|
| .XX: $\pm .01$ [.3]       | 2°     |
| .XXX: $\pm .005$ [.13]    |        |
| .XXXX: $\pm .0020$ [.051] |        |

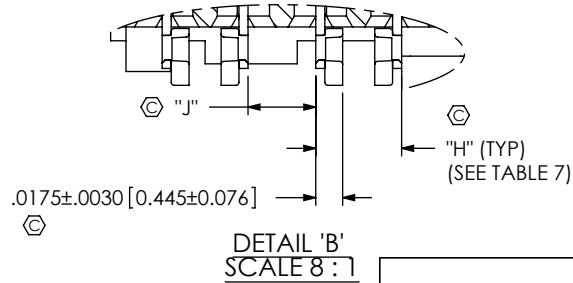
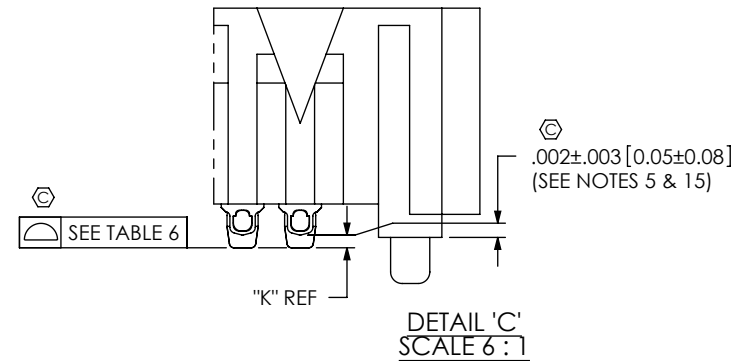
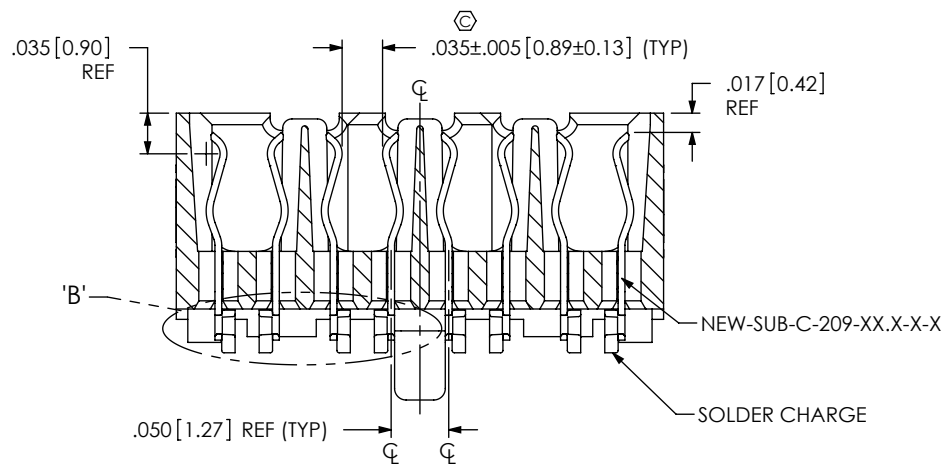
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e-Mail [info@SAMTEC.com](mailto:info@SAMTEC.com) code 55322

DESCRIPTION:  
**.050 PITCH SOCKET ARRAY ASSEMBLY**

SEAF-XX-XX.X-XX-XX-X-A-XX-K-TR

|                         |              |
|-------------------------|--------------|
| BY: BRATCHER 05/27/2004 | SHEET 1 OF 5 |
|-------------------------|--------------|



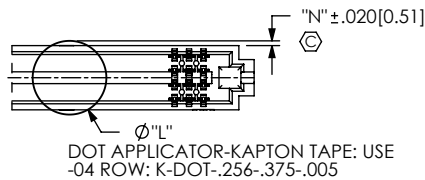
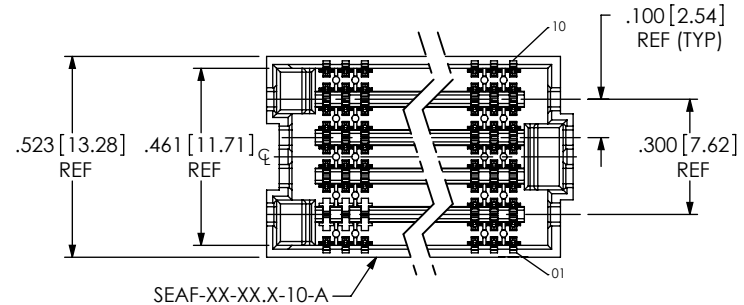
SECTION "A"-"A"  
SCALE 6:1

| TABLE 6    |             |
|------------|-------------|
| POSITION   | COPLANARITY |
| -10 TO -30 | .006 [0.15] |
| -40        | .009 [0.23] |
| -50        | .009 [0.23] |

| TABLE 7    |               |                   |               |                   |             |
|------------|---------------|-------------------|---------------|-------------------|-------------|
| LEAD STYLE | "H"           |                   | "J"           |                   | "K"         |
| -05.0      | .0530 - .0590 | [1.346] - [1.499] | .0410 - .0470 | [1.041] - [1.194] | .011 [0.28] |
| -06.0      | .0530 - .0620 | [1.346] - [1.575] | .0380 - .0470 | [.965] - [1.194]  | .011 [0.28] |
| -06.5      | .0530 - .0645 | [1.346] - [1.638] | .0355 - .0470 | [.902] - [1.194]  | .011 [0.28] |
| *** -07.5  | .0530 - .0645 | [1.346] - [1.638] | .0355 - .0470 | [.902] - [1.194]  | .011 [0.28] |

(\*\*\*= NOT TOOLED)

FIG 2  
-10: 10 ROW  
(SAME AS FIG 1, EXCEPT AS SHOWN)  
(SEAF-20-05.0-XX-10-1-A-XX-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

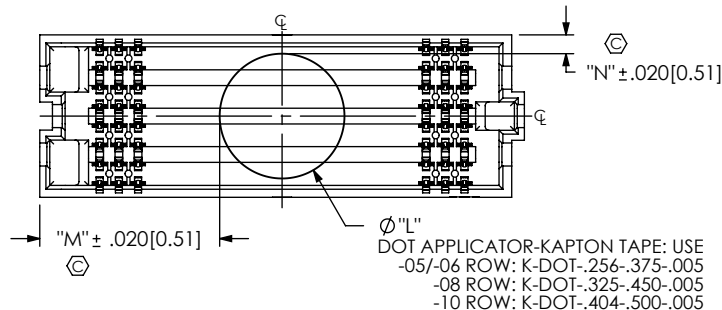


DOT APPLICATOR-KAPTON TAPE: USE  
-04 ROW: K-DOT-.256-.375-.005

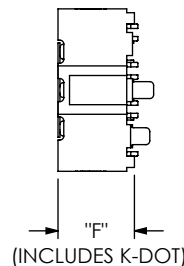
-04 ROW ONLY  
(SAME AS FIG 3, EXCEPT AS SHOWN)

| TABLE 8  |              |             |             |              |              |              |              |               |               |             |
|----------|--------------|-------------|-------------|--------------|--------------|--------------|--------------|---------------|---------------|-------------|
| ROWS     | "L"          | "M"         |             |              |              |              |              |               |               |             |
|          |              | □ 10 POS    | ⊠ 15 POS    | ** 19 POS    | 20 POS       | 25 POS       | 30 POS       | 40 POS        | 50 POS        | "N"         |
| -04      | .256 [6.50]  | .254 [6.44] | .379 [9.62] | .479 [12.16] | .504 [12.79] | .629 [15.97] | .754 [19.14] | 1.004 [25.49] | 1.254 [31.84] | .017 [.43]  |
| -05, -06 | .256 [6.50]  | .254 [6.44] | .379 [9.62] | .479 [12.16] | .504 [12.79] | .629 [15.97] | .754 [19.14] | 1.004 [25.49] | 1.254 [31.84] | .034 [.86]  |
| -08      | .325 [8.25]  | .219 [5.57] | .344 [8.74] | .444 [11.28] | .469 [11.92] | .594 [15.09] | .719 [18.27] | .969 [24.62]  | 1.219 [30.97] | .049 [1.24] |
| -10      | .404 [10.25] | .180 [4.57] | .305 [7.74] | .405 [10.28] | .430 [10.92] | .555 [14.09] | .680 [17.27] | .930 [23.62]  | 1.180 [29.97] | .060 [1.52] |

FIG 3  
-K: POLYIMIDE PAD  
(SEAF-20-05.0-XX-08-1-A-XX-K-TR SHOWN)  
(SAME AS FIG. 1, EXCEPT AS SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)



DOT APPLICATOR-KAPTON TAPE: USE  
-05/-06 ROW: K-DOT-.256-.375-.005  
-08 ROW: K-DOT-.325-.450-.005  
-10 ROW: K-DOT-.404-.500-.005



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e-Mail: info@SAMTEC.com code 55322

DESCRIPTION:  
.050 PITCH SOCKET ARRAY ASSEMBLY

DWG. NO.  
SEAF-XX-XX.X-XX-XX-X-A-XX-K-TR

BY: BRATCHER 05/27/2004 SHEET 2 OF 5

FIG 4  
-06: 6 ROW  
(SAME AS FIG 1, EXCEPT AS SHOWN)  
(SEAF-20-05.0-XX-06-1-A-XX-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

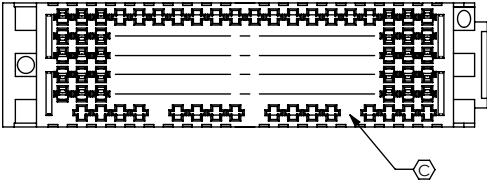
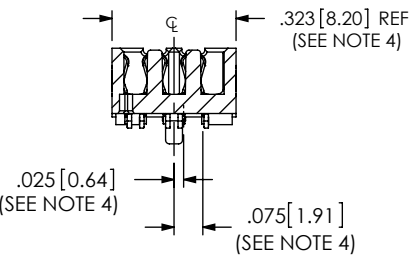
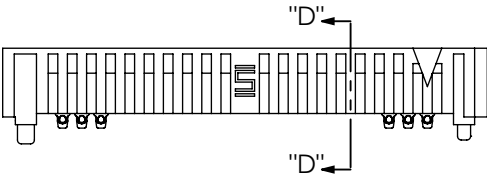
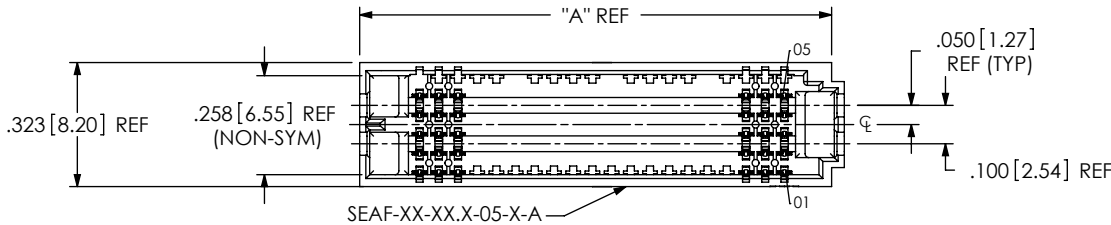
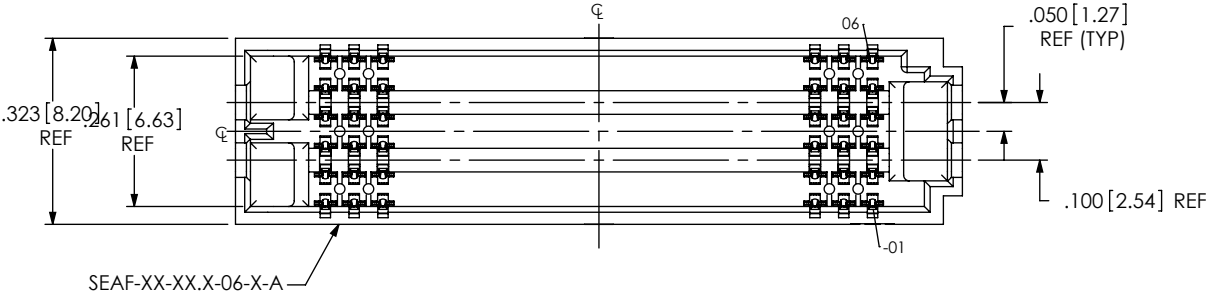


FIG 5  
-05: 5 ROW  
(SAME AS FIG 4, EXCEPT AS SHOWN)  
(SEAF-20-05.0-XX-05-1-A-XX-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

SECTION "D"- "D"

|   |  |   |  |
|---|--|---|--|
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| <p>SHEET SCALE: 1:0.333333</p>  |  | <p>DWG. NO.<br/>SEAF-XX-XX.X-XX-XX-X-A-XX-K-TR</p>  |  |
| <p>BY: BRATCHER 05/27/2004</p>  |  | <p>SHEET 3 OF 5</p>   |  |

FIG 7  
06 ROW x 19 POS.  
(SEE NOTE 12)  
(ONLY AVAILABLE -06.5 LEADSTYLE & -06 ROW)  
(SEAF-20-06.5-XX-06-1-XX-K-TR SHOWN)  
(SAME AS FIGS 1 & 4 EXCEPT AS SHOWN )  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

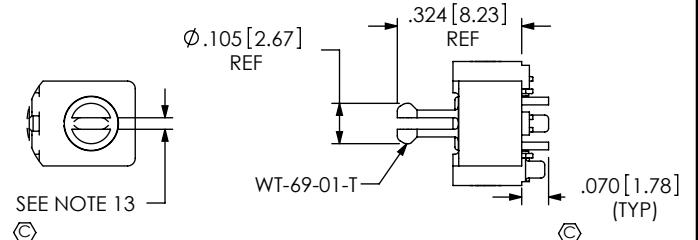
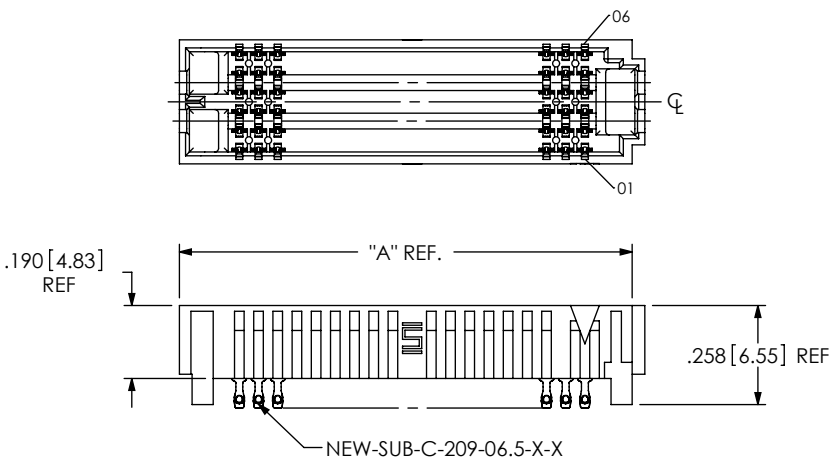


FIG 9  
\*\*\*\*\*RP OPTION  
(SEAF-20-05.0-XX-06-1-A-RP-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)  
(SAME AS FIG 7 EXCEPT AS SHOWN )  
(-RP OPTION VALID FOR SEAR MATE ONLY)  
(ONLY AVAILABLE WITH -05.0 LEAD STYLE 6, 8 & 10 ROW)

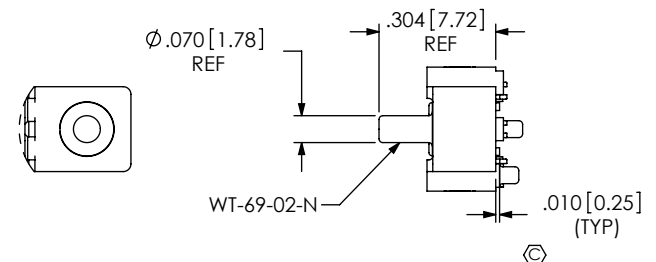


FIG 10  
-PP OPTION  
(SEAF-20-05.0-XX-06-1-A-PP-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)  
(SAME AS FIG 7 EXCEPT AS SHOWN )  
(-PP OPTION VALID FOR SEAR MATE ONLY)  
(ONLY AVAILABLE WITH -05.0 LEAD STYLE 6, 8 & 10 ROW)

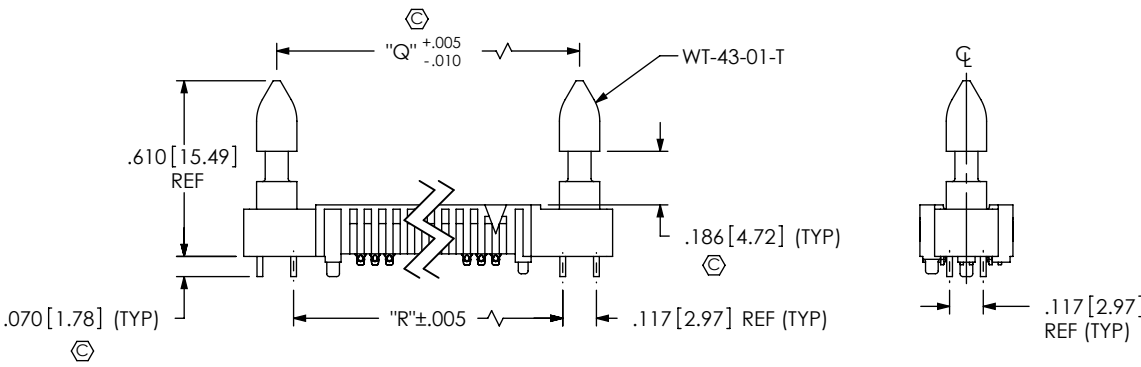
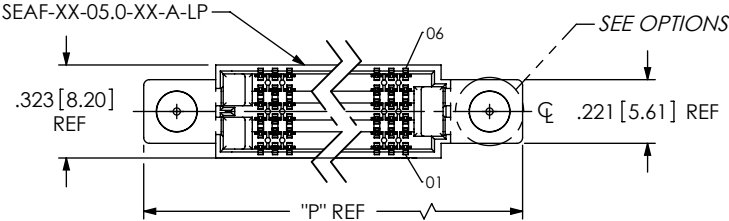


FIG 8  
-LP OPTION  
(SEAF-20-05.0-XX-06-1-A-LP-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)  
(SAME AS FIG 6 EXCEPT AS SHOWN )  
(-LP OPTION REQUIRED FOR SEAC MATE ONLY)  
(ONLY AVAILABLE WITH -05.0 LEAD STYLE -04, -06, -08 & -10 ROW)

| TABLE 9    |               |               |                 |
|------------|---------------|---------------|-----------------|
| No OF POS. | "P"           | "Q"           | "R"             |
| □ -10      | 1.262 [32.05] | 1.033 [26.24] | .9160 [23.266]  |
| ▣ -15      | 1.512 [38.40] | 1.283 [32.59] | 1.1660 [29.616] |
| ** -19     | 1.712 [43.48] | 1.483 [37.67] | 1.3660 [34.696] |
| -20        | 1.762 [44.75] | 1.533 [38.94] | 1.4160 [35.966] |
| ▤ -25      | 2.012 [51.10] | 1.783 [45.29] | 1.6660 [42.316] |
| -30        | 2.262 [57.45] | 2.033 [51.64] | 1.9160 [48.666] |
| -40        | 2.762 [70.15] | 2.533 [64.34] | 2.4160 [61.366] |
| -50        | 3.262 [82.85] | 3.033 [77.04] | 2.9160 [74.066] |

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e-Mail info@SAMTEC.com code 55322

DESCRIPTION:  
.050 PITCH SOCKET ARRAY ASSEMBLY

DWG. NO.  
SEAF-XX-XX.X-XX-XX-X-A-XX-K-TR

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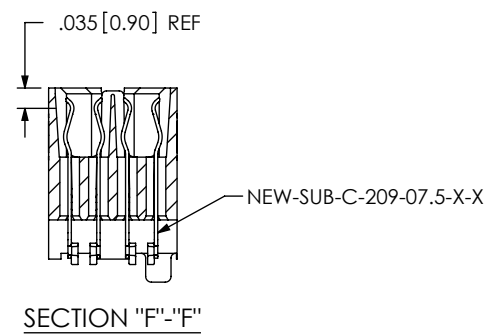
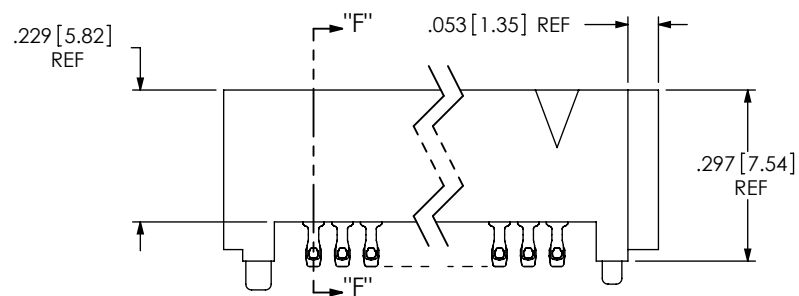
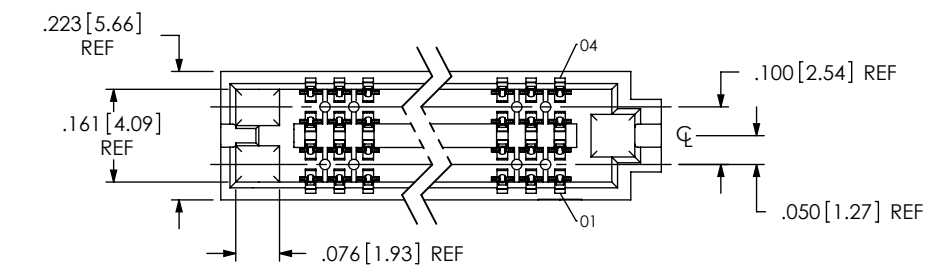


FIG 11  
-04: 4 ROW  
(SEAF-30-07.5-XX-04-1-A-XX-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)  
(SAME AS FIG 1 EXCEPT AS SHOWN )

|  |   |              |
|--|---|--------------|
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|  | 520 PARK EAST BLVD., NEW ALBANY, IN 47150<br>PHONE: 812-944-6733 FAX: 812-948-5047<br>e-Mail info@SAMTEC.com code 55322 |              |
|  | DESCRIPTION:<br>.050 PITCH SOCKET ARRAY ASSEMBLY  |              |
|  | DWG. NO.<br>SEAF-XX-XX.X-XX-XX-X-A-XX-K-TR  |              |
| BY: BRATCHER 05/27/2004  |   | SHEET 5 OF 5 |