

DO NOT SCALE FROM THIS PRINT

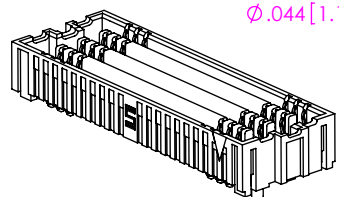
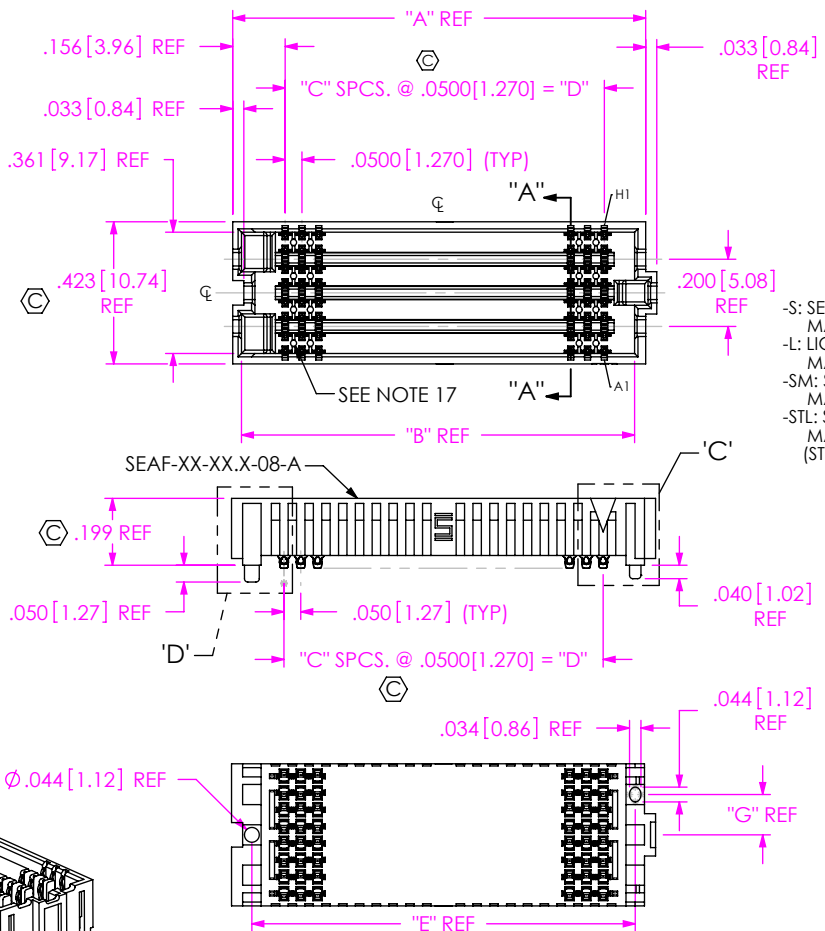


FIG 1  
-08: 8 ROW  
(SEAF-20-05.0-XX-08-1-A-XX-K-TR SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

- NOTES:
- REPRESENTS A CRITICAL DIMENSION.
  - MINIMUM PUSHOUT FORCE: 0.50 LBS.
  - NOTE DELETED.
  - ROW SOLDER TAILS ARE NOT SYMMETRICAL WITH BODY WIDTH - DIM .321 [8.15], (SEE SHEET 3, FIG 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.
  - WITHOUT -A AVAILABLE FOR EXISTING CUSTOMERS ONLY AS OF REVISION Y.
  - NOTE DELETED.
  - NOTE DELETED.
  - NOTE DELETED.
  - NOTE DELETED.
  - ATTACH LABEL "SEAX-0001" TO EACH TAPE & REEL PACKAGE.
  - SOLDER CHARGE VOLUME IS .00000891 CUBIC INCHES (REF).
  - NOTE DELETED.
  - SLOT ORIENTATION MUST BE AS SHOWN.
  - A-PINS STANDARD ON ALL BODIES, EXCEPT 6 x 19, SEE SHEET 1, FIG 1  
A-PINS ARE OPTIONAL ON 6 x 19, SEE SHEET 4, FIG 7
  - MEASURED FIRST & LAST POSITIONS ONLY, ALL ROWS.
  - NOTE DELETED.
  - NON-FUNCTIONAL VOIDING IN PLASTIC BODY TO BE AT SAMTEC'S DISCRETION.
  - THESE OPTIONS AVAILABLE AS ASO (APPLICATION SPECIFIC OPTIONS) ONLY.  
PLEASE CONTACT SAMTEC FOR MORE INFORMATION.
  - NOTE DELETED.
  - NOTE DELETED.
  - ORDERS WILL BE PACKAGED ACCORDING TO THE SAMTEC PACKAGING EFFICIENCY STANDARDS (SPES) FOUND ON [WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)
  - ATTACH LABEL-4X2 TO EACH REEL.

SEAF-XX-XX.X-XX-XX-X-A-XX-K-XR

- No OF POSITIONS
- -10, ☒ -15, \*\* -19, -20
  - △ -25, -30, -40, -50 (PER ROW)
- 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)

- PLATING SPECIFICATION
- 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)
  - STL: SELECTIVE GOLD (30μ") IN CONTACT AREA, MATTE TIN/LEAD ON TAIL (USE NEW-SUB-C-209-XX.X-STL-X) (STL PLATING NOT AVAILABLE WITH -LP, -RP & -PP OPTIONS)

- ROWS
- 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)
  - -14: 14 ROWS (SEE SHT 5, FIG 12)

- \* = NOT TOOLED.
- = 10 POSITION ONLY AVAILABLE IN 4 ROW.
- ☒ = ONLY AVAILABLE WITH -05.0 BODY HEIGHT, -10 ROW. AVAILABLE IN -04 ROW -05.0 LEAD STYLE
- △ = ONLY AVAILABLE WITH -05.0, -06.5 & -07.5 BODY HEIGHT AND 4 ROW. TOOLED IN -07.5 (NOT ENGINEERING APPROVED)
- \*\* = ONLY AVAILABLE WITH -06.5 BODY HEIGHT, AND -06 ROW.
- \*\*\*\* = ONLY AVAILABLE WITH -05.0 BODY HEIGHT, -04, -06, -08 & -10 ROW.
- \*\*\*\*\* = NOT RELEASED FOR PRODUCTION.
- = 14 ROW ONLY AVAILABLE IN -06.5 LEAD STYLE AND -40 POS.

TAPE & REEL (SEE NOTES 10 & 21)  
-TR: TAPE & REEL  
-FR: FULL REEL QTY. TAPE & REEL

K-DOT  
(SEE SHT 2, FIG 3)

- OPTION
- \*\*\*\*-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)

ALIGNMENT PINS  
(SEE NOTES 6 & 14)

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)

TABLE 2		
No OF ROWS	"G"	
-04	.079	[2.01]
-05	.120	[3.05]
-06	.120	[3.05]
-08	.120	[3.05]
-10	.120	[3.05]
-14	.120	[3.05]

No. OF ROWS	TABLE 1 "F" (INCLUDES K-DOT)			
	LEAD STYLE			
	-05.0	-06.0	-06.5	-07.5
-04, -05, -06, -08, -10, -14	.204 [5.18]	.243 [6.17]	.263 [6.68]	.302 [7.67]

No OF POS.	TABLE 3				
	"A"	"B"	"C"	"D"	"E"
-10	.729 [18.52]	.670 [17.02]	9	.4500 [11.430]	.6410 [16.281]
-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]
-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]

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

SEAF LEAD STYLE	TABLE 5							
	STACK HEIGHT							
	SEAM LEAD STYLE							
	-02.0	-03.0	-03.5	-06.5	-07.0	-09.0	-11.0	* -13.0
-05.0	7mm	8mm	8.5mm	11.5mm	12mm	14mm	16mm	18mm
-06.0	8mm	9mm	9.5mm	12.5mm	13mm	15mm	17mm	19mm
-06.5	8.5mm	9.5mm	10mm	13mm	13.5mm	15.5mm	17.5mm	19.5mm
-07.5	9.5mm	10.5mm	11mm	14mm	14.5mm	16.5mm	18.5mm	20.5mm

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

TOLERANCES ARE:  
DECIMALS ANGLES  
.XX: ±.01[0.3]  
.XXX: ±.005[0.13]  
.XXXX: ±.0020[0.051]

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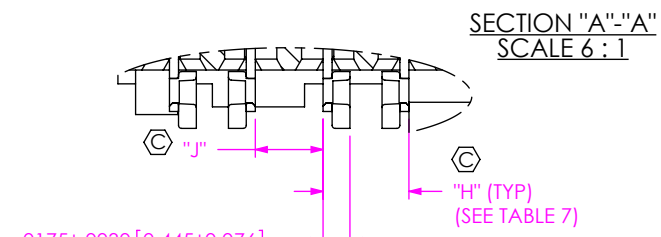
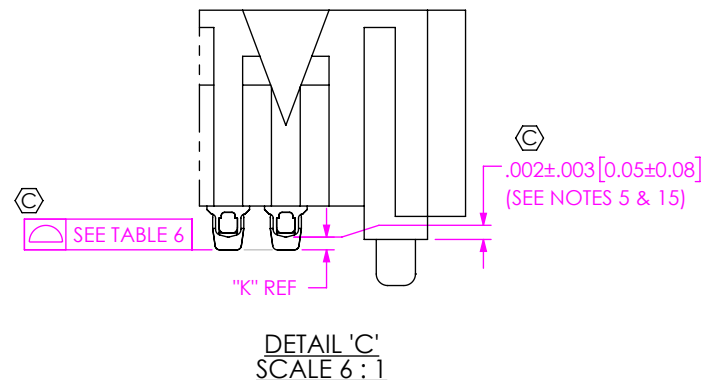
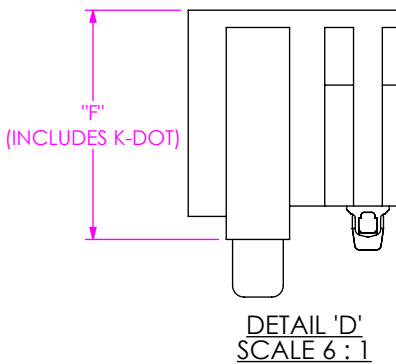
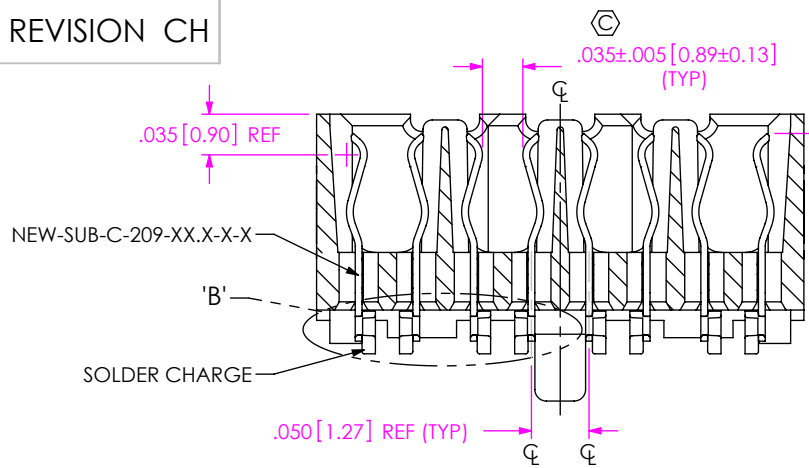
MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2:1

INSULATOR: LCP, COLOR: BLACK, UL 94 V-0  
CONTACT: COPPER ALLOY

DESCRIPTION:  
.050 PITCH SOCKET ARRAY ASSEMBLY

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

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

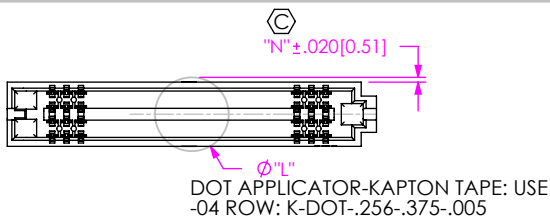
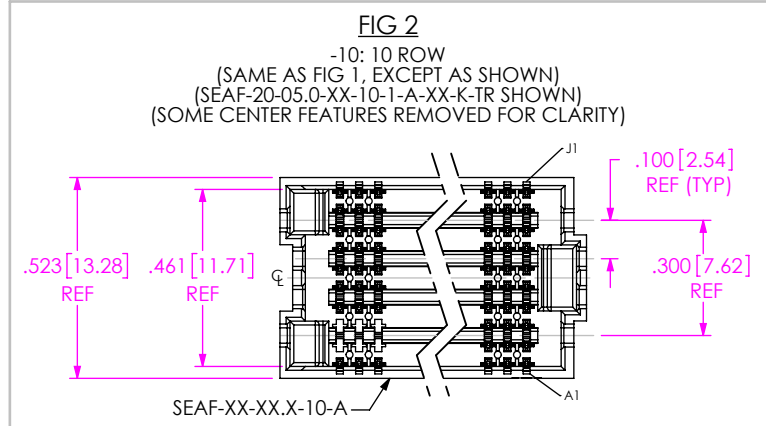


**TABLE 6**

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

**TABLE 7**

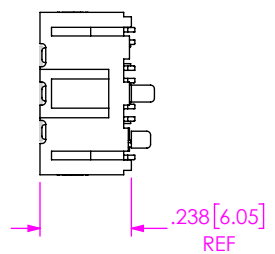
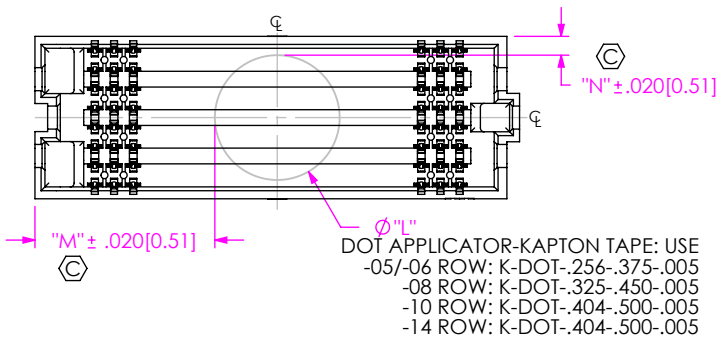
LEAD STYLE	"H"	"J"	"K"
-05.0	.0530 - .0590 [1.346] - [1.499]	.0410 - .0470 [1.041] - [1.194]	.011 [0.28]
-06.0	.0530 - .0620 [1.346] - [1.575]	.0380 - .0470 [.965] - [1.194]	.011 [0.28]
-06.5	.0530 - .0645 [1.346] - [1.638]	.0355 - .0470 [.902] - [1.194]	.011 [0.28]
-07.5	.0515 - .0620 [1.308] - [1.575]	.0355 - .0470 [.965] - [1.232]	.011 [0.28]



**TABLE 8**

ROWS	"L"	"M"										"N"
		10 POS	15 POS	19 POS	20 POS	25 POS	30 POS	40 POS	50 POS			
-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]		
-14	.404 [10.25]	N/A	N/A	N/A	N/A	N/A	N/A	.930 [23.62]	N/A	.160 [4.05]		

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



**FIG 3**  
-K: POLYIMIDE PAD  
(SEAF-20-06.0-XX-08-1-A-XX-K-TR SHOWN)  
(SAME AS FIG. 1, EXCEPT AS SHOWN)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

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520 PARK EAST BLVD, NEW ALBANY, IN 47150  
PHONE: 812-944-6733 FAX: 812-948-5047  
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-XR  
BY: BRATCHER 05/27/2004 SHEET 2 OF 5

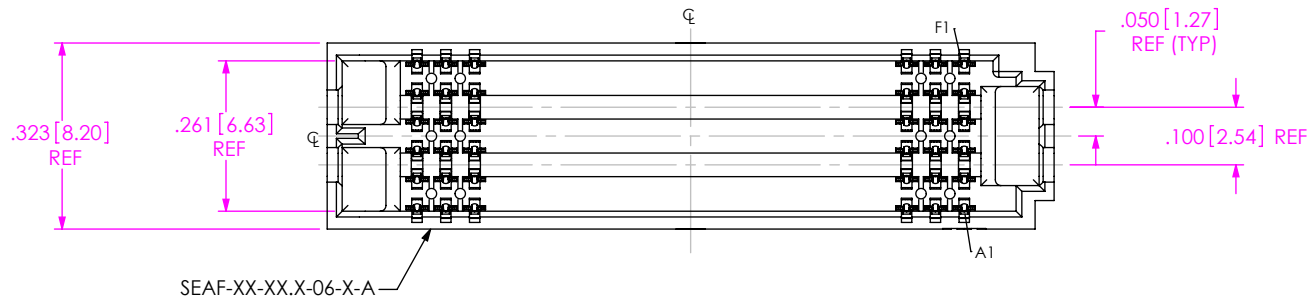
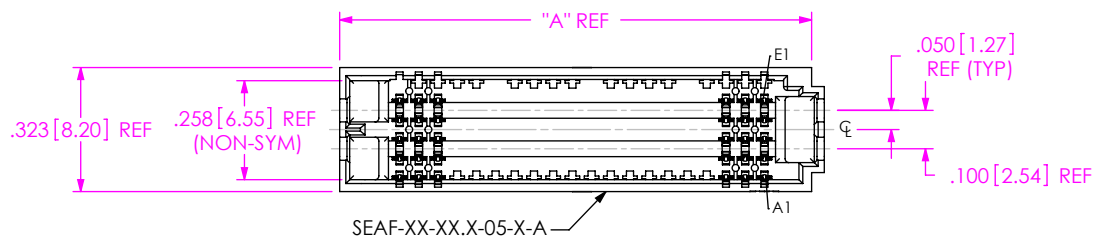


FIG 4  
 -06: 6 ROW  
 (SAME AS FIG 1, EXCEPT AS SHOWN)  
 (SEAF-20-05.0-XX-06-1-A-XX-K-TR SHOWN)  
 (SOME CENTER FEATURES REMOVED FOR CLARITY)



SEAF-XX-XX.X-05-X-A

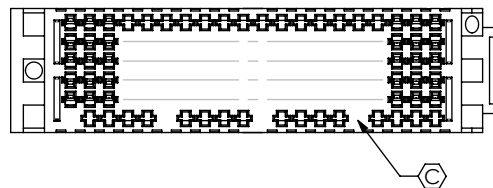
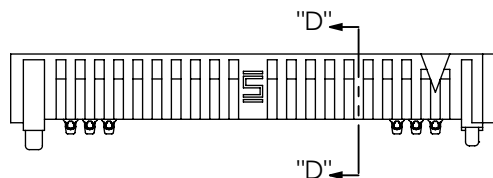
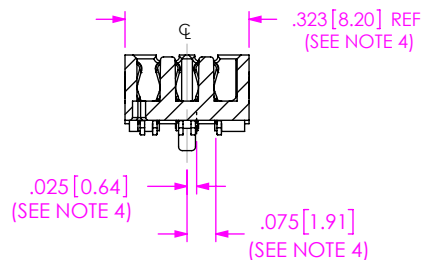


FIG 5  
 -05: 5 ROW  
 (SAME AS FIG 4, EXCEPT AS SHOWN)  
 (SEAF-20-05.0-XX-05-1-A-XX-K-TR SHOWN)  
 (SOME CENTER FEATURES REMOVED FOR CLARITY)



SECTION "D"-"D"

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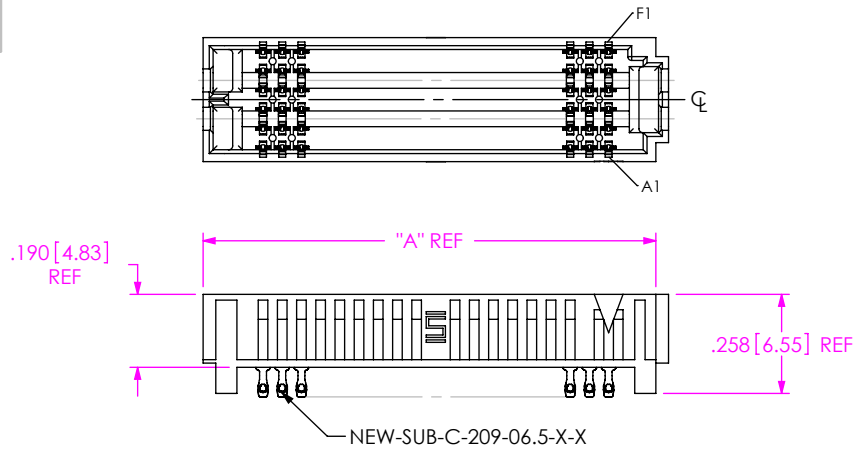


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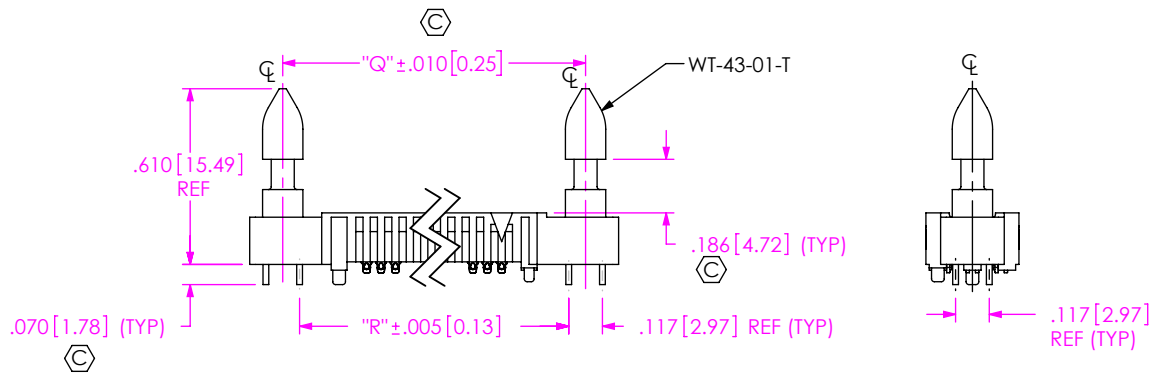
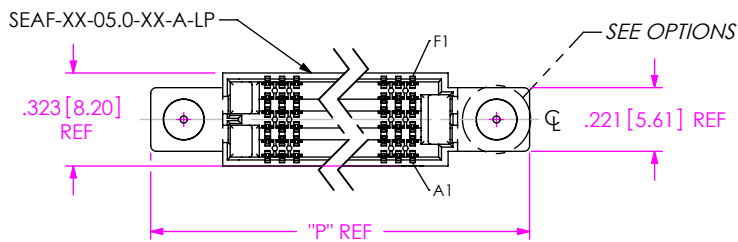
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 .050 PITCH SOCKET ARRAY ASSEMBLY

DWG. NO.  
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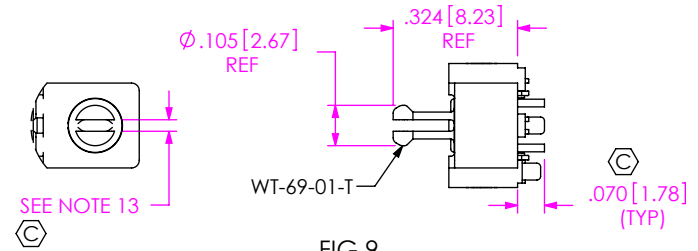
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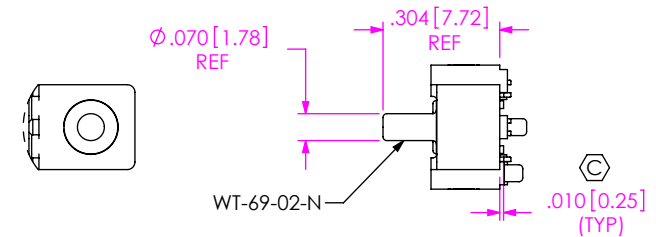
**FIG 7**  
06 ROW x 19 POS  
(ONLY AVAILABLE -06.5 LEADSTYLE & -06 ROW)  
(SEAF-20-06.5-XX-06-1-XX-K-TR SHOWN)  
(SAME AS FIGS 1 & 4 EXCEPT AS SHOWN )  
(SOME CENTER FEATURES REMOVED FOR CLARITY)



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



**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 8 EXCEPT AS SHOWN )  
(-PP OPTION VALID FOR SEAR MATE ONLY)  
(ONLY AVAILABLE WITH -05.0 LEAD STYLE 6, 8 & 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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PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail info@SAMTEC.com code 55322

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BY: BRATCHER 05/27/2004 SHEET 4 OF 5

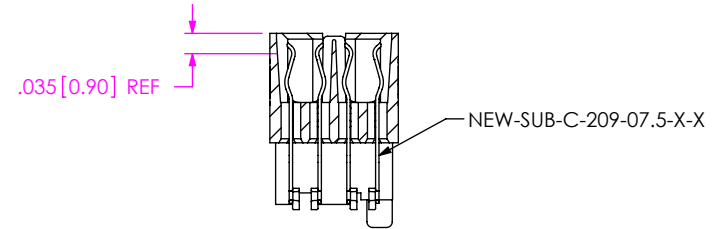
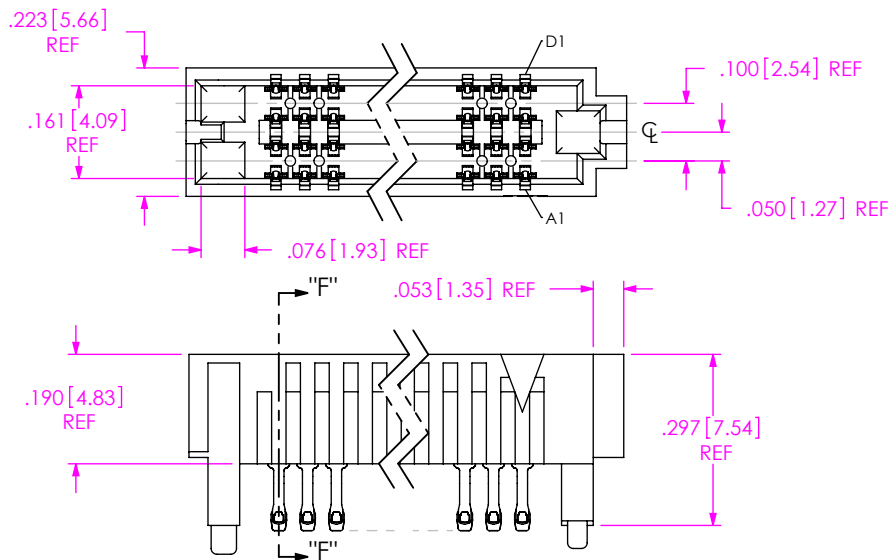


FIG 11  
 -04: 4 ROW  
 (SEAF-30-07.5-XX-04-1-A-XX-K-TR SHOWN)  
 (SOME CENTER FEATURES REMOVED FOR CLARITY)  
 (SAME AS FIG 1 EXCEPT AS SHOWN)

SECTION "F"- "F"

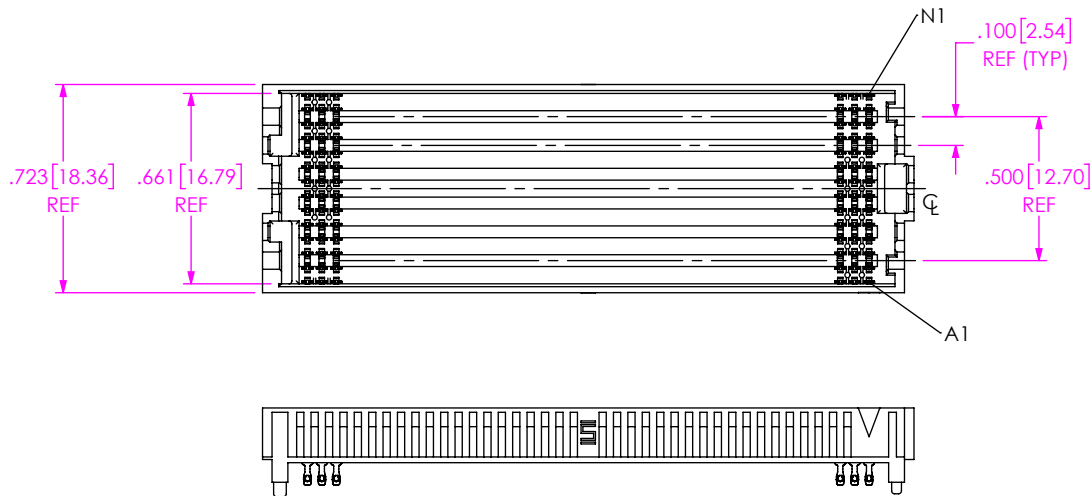


FIG 12  
 -14: 14 ROW  
 (SEAF-40-06.5-XX-14-1-A-XX-K-TR SHOWN)  
 (SOME CENTER FEATURES REMOVED FOR CLARITY)  
 (SAME AS FIG 1 EXCEPT AS SHOWN)

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

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