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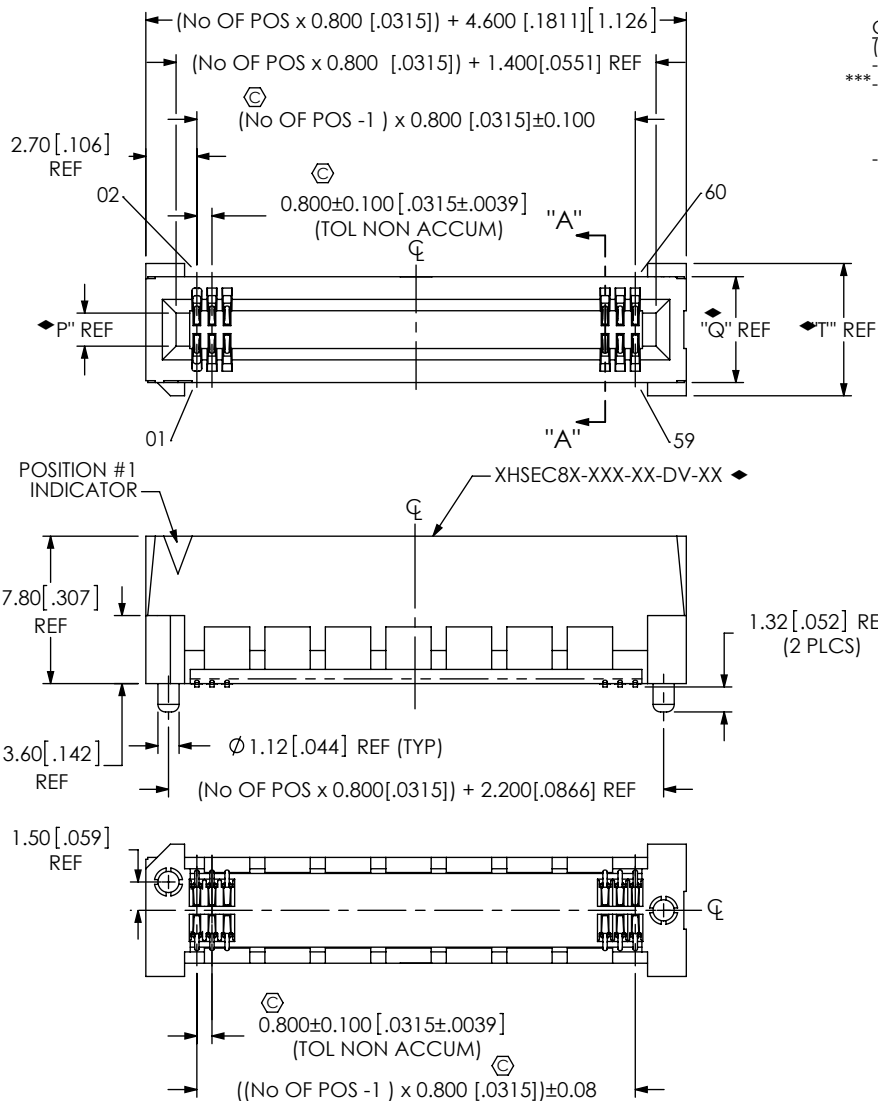


FIG 1
FOR POSITIONS -T0, -20 & -30
HSEC8-130-01-XX-DV-A SHOWN
(SOME FEATURES NOT SHOWN FOR CLARITY)
◆ = (SEE TABLE 9, SHT 3)

HSEC8-1XXX-XX-XX-DV-X-XX

No OF POSITIONS (PER ROW)
-10, -20, -30 (SEE FIG 1)
-09, -13, -25, -37, -49, -60, -70, -80, -90, -100 (SEE FIG 2, SHT 2)

CARD THICKNESS

(SEE TABLE 9, SHT 3)
-01: 1.57 [.062] CARD
***-02: 2.00 [.079] CARD
(10-60 POS, MULTIPLES OF 10 ONLY)
(-K & -TR ONLY FOR OPTION 2)
(USE HSEC8A-XXX-02-DV-XX)
-03: 2.36 [.093] CARD
(10-100 POS, MULTIPLES OF 10 ONLY)
(-K & -TR ONLY FOR OPTION 2)
(USE RHSEC8-XXX-03-DV-XX)
(SEE NOTE 7 & 10)

PLATING SPECIFICATION

-SM: 30μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
-H: 30μ" HEAVY GOLD IN CONTACT AREA, 3μ" GOLD TAIL
-S: 30μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
-L: 10μ" LIGHT SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL

ROW SPECIFICATION

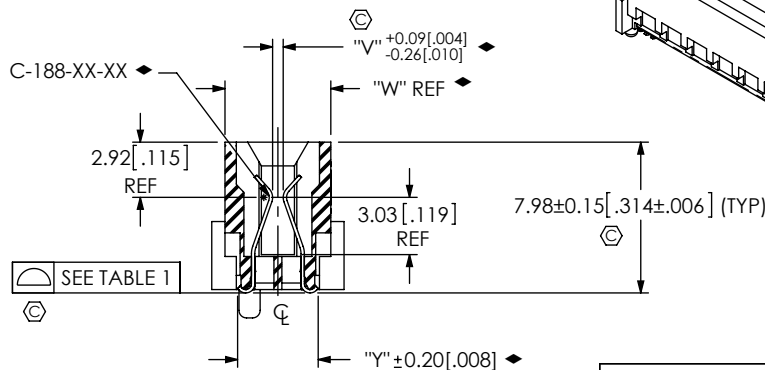
** = AVAILABLE ONLY WITH -01 CARD THICKNESS
*** = FOR EXISTING CUSTOMER ONLY
■ = AVAILABLE ONLY WITH END OPTIONS -BL, -WT, & -L2

OPTION 2

**PE: PASS THROUGH (SHT 7, FIG 7)
(10, 13, & 20 POS ONLY)
(-A OPTION ONLY)
(NOT AVAILABLE WITH ANY OTHER OPTION 2, EXCEPT -K AND/OR -TR)
**BL: BOARD LOCK (SHT 5, FIG 5) (SEE NOTE 11)
**GR: GUIDE RAILS (SHT 6, FIG 6)
(10-60 POS, MULTIPLES OF 10 ONLY)
(SEE NOTE 11) (-TR PACKAGING ONLY)
**WT: WELD TAB (SHT 7, FIG 8)
(-A OPTION ONLY)
**L: LATCHING (SHT 4, FIG 4)
(13, 25, 37, & 49 POS ONLY) (SEE NOTE 11)
**L2: ECDP LATCHING (SHT 8, FIG 9)
(09, 13, 25, & 49 POS ONLY) (SEE NOTE 11)
-K: POLYIMIDE FILM PAD (SEE SHT 2, FIG 3)
-TR: TAPE & REEL
(09 THRU 70 POS ONLY)
(LEAVE BLANK FOR TRAY)

OPTION 1

-A: ALIGNMENT PIN
(USE XHSEC8X-XXX-XX-DV-A)
(LEAVE BLANK FOR NO ALIGNMENT PIN, USE XHSEC8-XXX-01-DV-LC, NOT AVAILABLE FOR CARD THICKNESS -02 & -03 SEE FIG 10, SHT 3)



SECTION "A"- "A"

TABLE 1	
No OF POS	COPLANARITY
-10 THRU -60	0.102 [.0040]
-70 THRU -100	0.152 [.0060]

NOTES:

1. Ⓢ REPRESENTS A CRITICAL DIMENSION.
2. BURR ALLOWANCE: 0.04[.0015] MAX.
3. MINIMUM PUSHOUT FORCE: 2.2 NEWTONS.
4. ALL TAIL TO TAIL DIMENSIONS MEASURED TIP TO TIP.
5. ASSEMBLIES TO BE PACKAGED IN TRAYS, UNLESS -TR IS SPECIFIED.
6. NOTE DELETED.
7. MATING EDGE CARD THICKNESS TOLERANCE TO BE ±0.15 [.006] OF NOMINAL.
8. NOTE DELETED.
9. NOTE DELETED.
10. MATING CARD MUST HAVE LEAD-IN. SEE SAMTEC FOOTPRINT FOR SPECIFICATIONS.
11. L, L2, & BL IS NOT APPLICABLE FOR GUIDE RAIL TYPE USE. GR NOT APPLICABLE FOR L, L2, OR BL TYPE USE.

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UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES ARE:

DECIMALS ANGLES
.X: ± .3 [.01]
.XX: ± .13 [.005]
.XXX: ± .05 [.0020]

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MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2.5:1
INSULATOR: LCP,
COLOR: -01 CARD THICKNESS BLACK,
-02 THRU -04 CARD THICKNESS NATURAL
CONTACT: BeCu

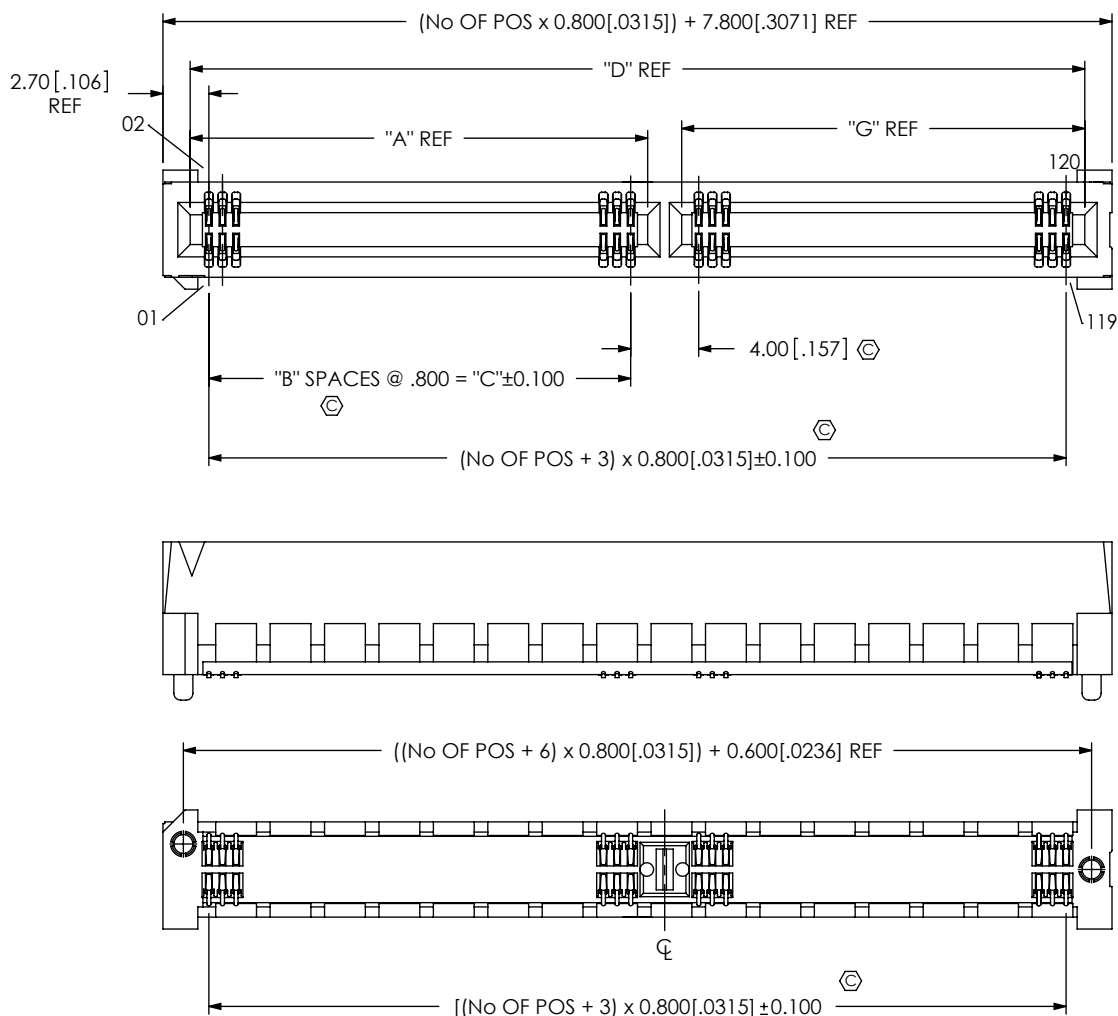
DESCRIPTION:
0.8mm HIGH SPEED EDGE CARD ASSEMBLY

DWG. NO.
HSEC8-1XXX-XX-XX-DV-X-XX

BY: BRATCHER 01/24/03 SHEET 1 OF 8

samtec

520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322



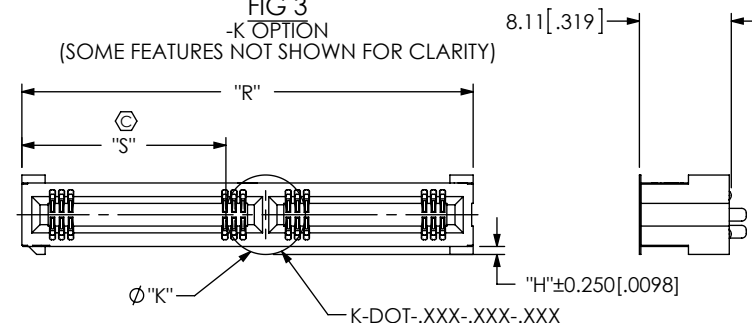
No OF POS	"A"	"B"	"C"	"D"	"G"
■ **09	4.50[.177]	3	2.400[.0945]	11.80[.465]	5.30[.209]
**13	6.10[.240]	5	4.000[.1575]	15.00[.591]	6.90[.272]
**25	6.10[.240]	5	4.000[.1575]	24.60[.969]	16.50[.650]
**37	18.10[.713]	20	16.000[.6299]	34.20[1.346]	14.10[.555]
-40	18.90[.744]	21	16.800[.6614]	36.60[1.441]	15.70[.618]
**49	22.90[.902]	26	20.800[.8189]	43.80[1.724]	18.90[.744]
-50	22.90[.902]	26	20.800[.8189]	44.60[1.756]	19.70[.776]
-60	26.90[1.059]	31	24.800[.9764]	52.60[2.071]	23.70[.933]
-70	26.90[1.059]	31	24.800[.9764]	60.60[2.386]	31.70[1.248]
-80	26.90[1.059]	31	24.800[.9764]	68.60[2.701]	39.70[1.563]
-90	26.90[1.059]	31	24.800[.9764]	76.60[3.016]	47.70[1.878]
-100	26.90[1.059]	31	24.800[.9764]	84.60[3.331]	55.70[2.193]

** = AVAILABLE ONLY WITH -01 CARD THICKNESS

■ = AVAILABLE ONLY WITH END OPTIONS -BL, -WT & -L2

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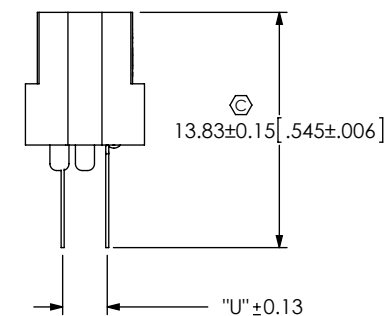
FIG 3
-K OPTION
(SOME FEATURES NOT SHOWN FOR CLARITY)



OPTION 2	No OF POS	"R"	"S"
NONE	-10 THRU -30	(No OF POS x 0.800[.0315]) + 4.600[.1811] REF	
	-13, -25, -37, -40 THRU -100	(No OF POS x 0.800[.0315]) + 7.800[.3071] REF	
**WT	-10 THRU -30	(No OF POS x 0.800[.0315]) + 9.200[.3622] REF	
	-13, -25, -37, & -49	(No OF POS x 0.800[.0315]) + 12.400[.4882] REF	
**L	-10 THRU -30	(No OF POS x 0.800[.0315]) + 18.400[.7244] REF	
	-13, -25, -37, -40 THRU -100	(No OF POS x 0.800[.0315]) + 15.850[.6240] REF	
**BL	-10 THRU -30	(No OF POS x 0.800[.0315]) + 19.050[.7500] REF	
	-13, -25, -37, -40 THRU -100	(No OF POS x 0.800[.0315]) + 15.850[.6240] REF	
**PE	-10, -13, & -20	(No OF POS x 0.800[.0315]) + 7.000[.2756] REF	
**GR	-10, -20, -30	(No OF POS x 0.800[.0315]) + 4.600[.1811] REF	
	-40, -50, -60	(No OF POS x 0.800[.0315]) + 7.800[.3071] REF	
**L2	-09, -13, -25, -49	(No OF POS x 0.800[.0315]) + 11.800[.4646] REF	

** = AVAILABLE ONLY WITH -01 CARD THICKNESS

CARD THICKNESS	K-DOT-XXX-XXX-XXX	"K"	"U"	"H"
-01	K-DOT-.276-.375-.005	7.01[.276]	2.61[.103]	0.705[.0278]
-02	K-DOT-.276-.375-.005	7.01[.276]	3.04[.120]	0.990[.0390]
-03	K-DOT-.246-.375-.005	6.25[.246]	3.40[.134]	0.070[.0303]



IN-PROCESS

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PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:

0.8mm HIGH SPEED EDGE CARD ASSEMBLY

DWG. NO.

HSEC8-1XXX-XX-XX-DV-X-XX

BY: BRATCHER 01/24/03

SHEET 2 OF 8

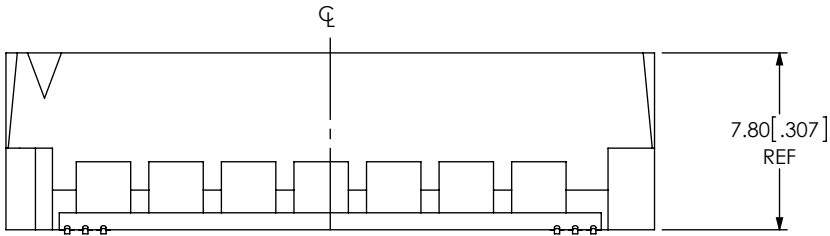


FIG 10
 **NON-ALIGNMENT PIN OPTION
 HSEC8-130-01-XX-DV SHOWN
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (** = AVAILABLE ONLY WITH -01 CARD THICKNESS)
 (SOME FEATURES NOT SHOWN FOR CLARITY)

TABLE 9									
CARD	OPTION 2	BODY	CONTACT	"P"	"Q"	"T"	"V"	"W"	"Y"
-01	-L	RHSEC8-XXX-01-DV-XX-L	C-188-02-X	1.75[.070]	5.60[.220]	7.00[.280]	0.56[.022]	5.60[.220]	4.26[.168]
	-L2	RHSEC8-XXX-01-DV-XX-L2	C-188-02-X					5.60[.220]	
	-BL	RHSEC8-XXX-01-DV-XX-BL	C-188-02-X					5.60[.220]	
	-GR	RHSEC8-XXX-01-DV-XX-GR	C-188-02-X					5.60[.220]	
	-PE	HSEC8-XXX-01-DV-A-PE	C-188-01-X					4.60[.180]	
	-WT	RHSEC8-XXX-01-DV-A-WT	C-188-02-X					5.60[.220]	
	NONE	RHSEC8-XXX-01-DV-XX	C-188-02-X					5.60[.220]	
-02	NONE	HSEC8A-XXX-02-DV-A	C-188-01-X	2.18[.086]	6.03[.237]	7.43[.293]	0.99[.039]	5.03[.198]	4.69[.185]
-03	NONE	RHSEC8-XXX-03-DV-A	C-188-02-X	2.54[.100]	6.39[.252]	7.79[.307]	1.35[.053]	6.39[.252]	5.05[.199]

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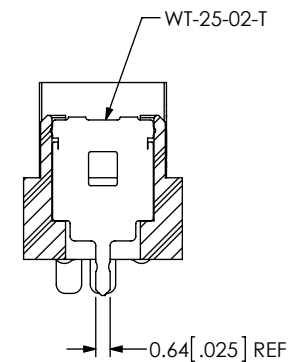
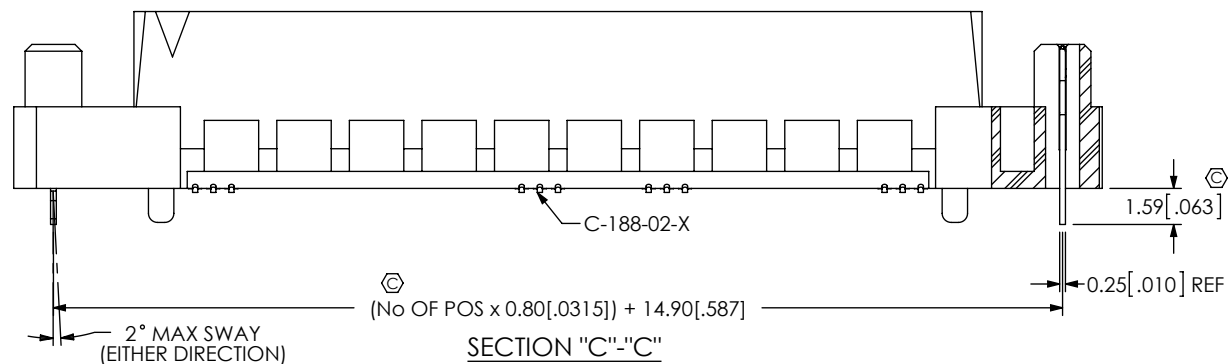
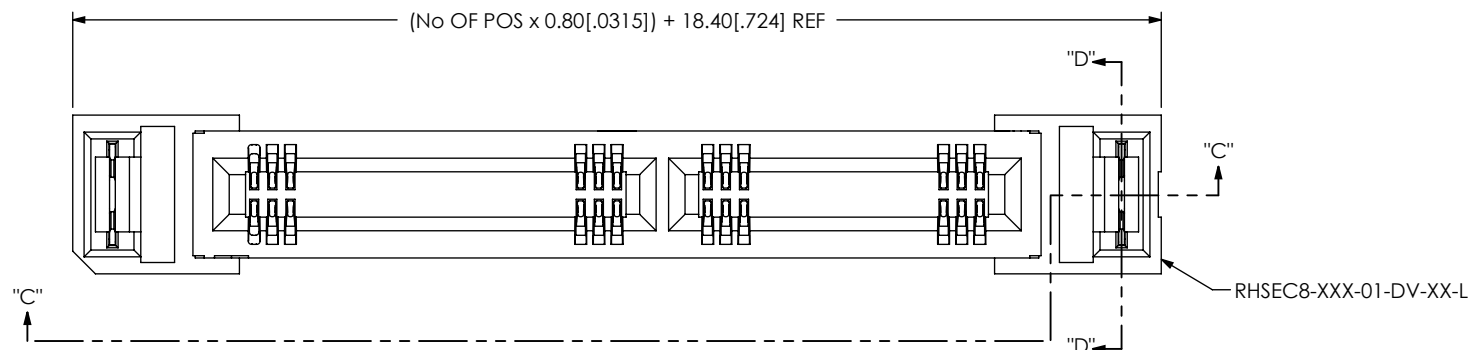
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DWG. NO.
 HSEC8-1XXX-XX-XX-DV-X-XX

BY: BRATCHER 01/24/03

SHEET 3 OF 8



SECTION "D"-"D"

FIG 4
 **L: LATCHING OPTION
 HSEC8-137-01-XX-DV-A-L SHOWN
 AVAILABLE IN -13, -25, -37 & -49 POSITIONS ONLY
 (NOT AVAILABLE FOR -GR TYPE USE)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)
 (SOME FEATURES NOT SHOWN FOR CLARITY)
 (** = AVAILABLE ONLY WITH -01 CARD THICKNESS)

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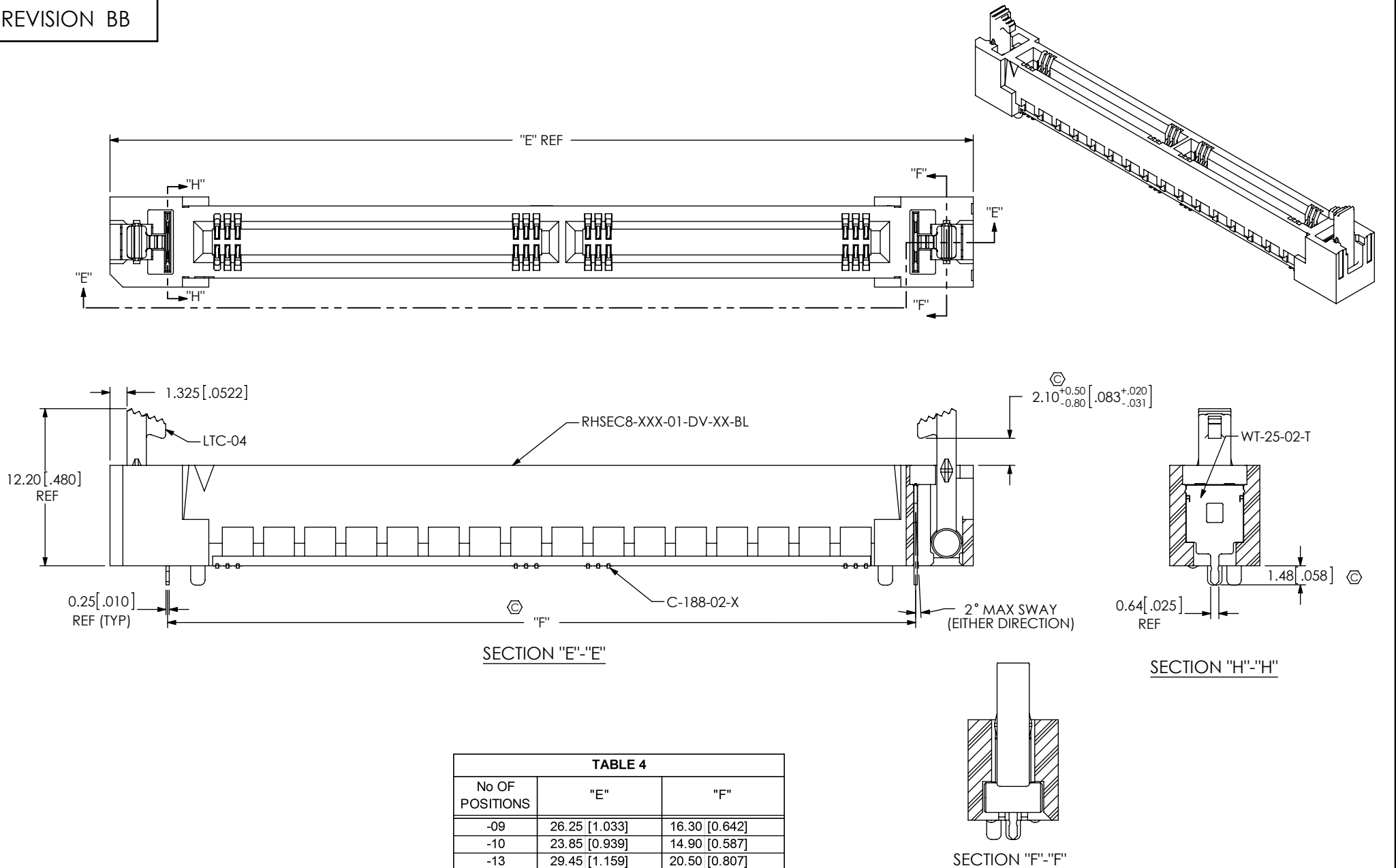
0.8mm HIGH SPEED EDGE CARD ASSEMBLY

DWG. NO.

HSEC8-1XXX-XX-XX-DV-X-XX

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SHEET 4 OF 8



SECTION "E"-"E"

SECTION "H"-"H"

SECTION "F"-"F"

TABLE 4		
No OF POSITIONS	"E"	"F"
-09	26.25 [1.033]	16.30 [0.642]
-10	23.85 [0.939]	14.90 [0.587]
-13	29.45 [1.159]	20.50 [0.807]
-20	31.85 [1.254]	22.90 [0.902]
-25	39.05 [1.537]	30.10 [1.185]
-30	39.85 [1.569]	30.90 [1.217]
-37	48.65 [1.915]	39.70 [1.563]
-40	51.05 [2.010]	42.10 [1.657]
-49	58.25 [2.293]	49.30 [1.941]
-50	59.05 [2.325]	50.10 [1.972]
-60	67.05 [2.640]	58.10 [2.287]
-70	75.05 [2.955]	66.10 [2.602]
-80	83.05 [3.270]	74.10 [2.917]
-90	91.05 [3.585]	82.10 [3.232]
-100	99.05 [3.900]	90.10 [3.547]

FIG 5

** -BL: BOARD LOCK OPTION
HSEC8-160-01-XX-DV-A-BL SHOWN
(NOT AVAILABLE FOR -GR TYPE USE)
(FOR -09, -13, -25, 37, -40, -49, -50, -60, -70, -80, -90 & -100
POSITIONS DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)
(FOR -10, -20 & -30 POSITIONS DIFFERENT AS SHOWN,
OTHERWISE SAME AS FIG 1)
(** = AVAILABLE ONLY WITH -01 CARD THICKNESS)
(SOME FEATURES NOT SHOWN FOR CLARITY)
(AVAILABLE IN ALL POSITIONS)

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DWG. NO. HSEC8-1XXX-XX-XX-DV-X-XX	
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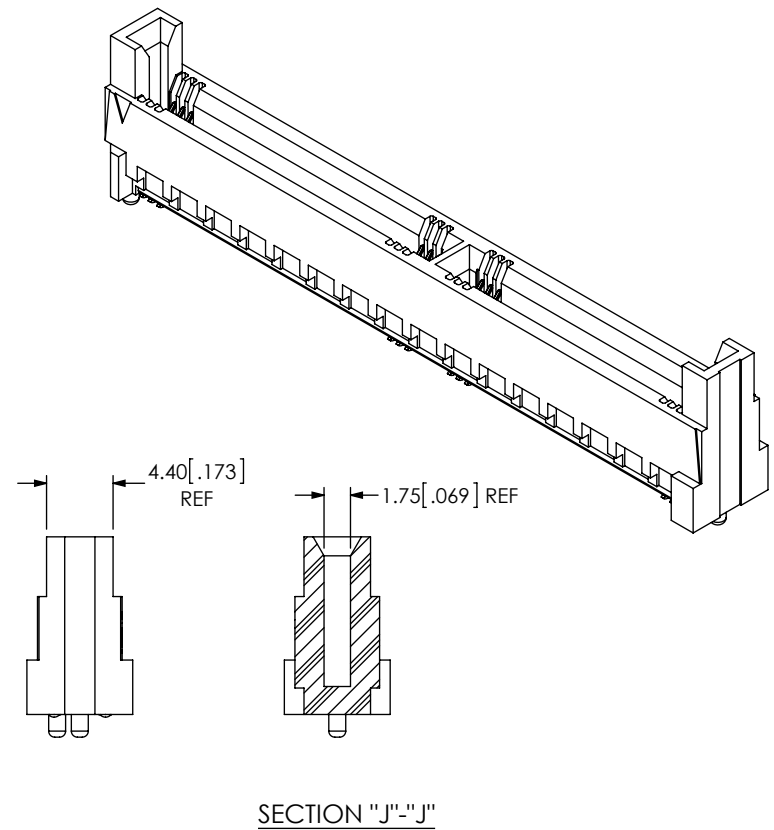
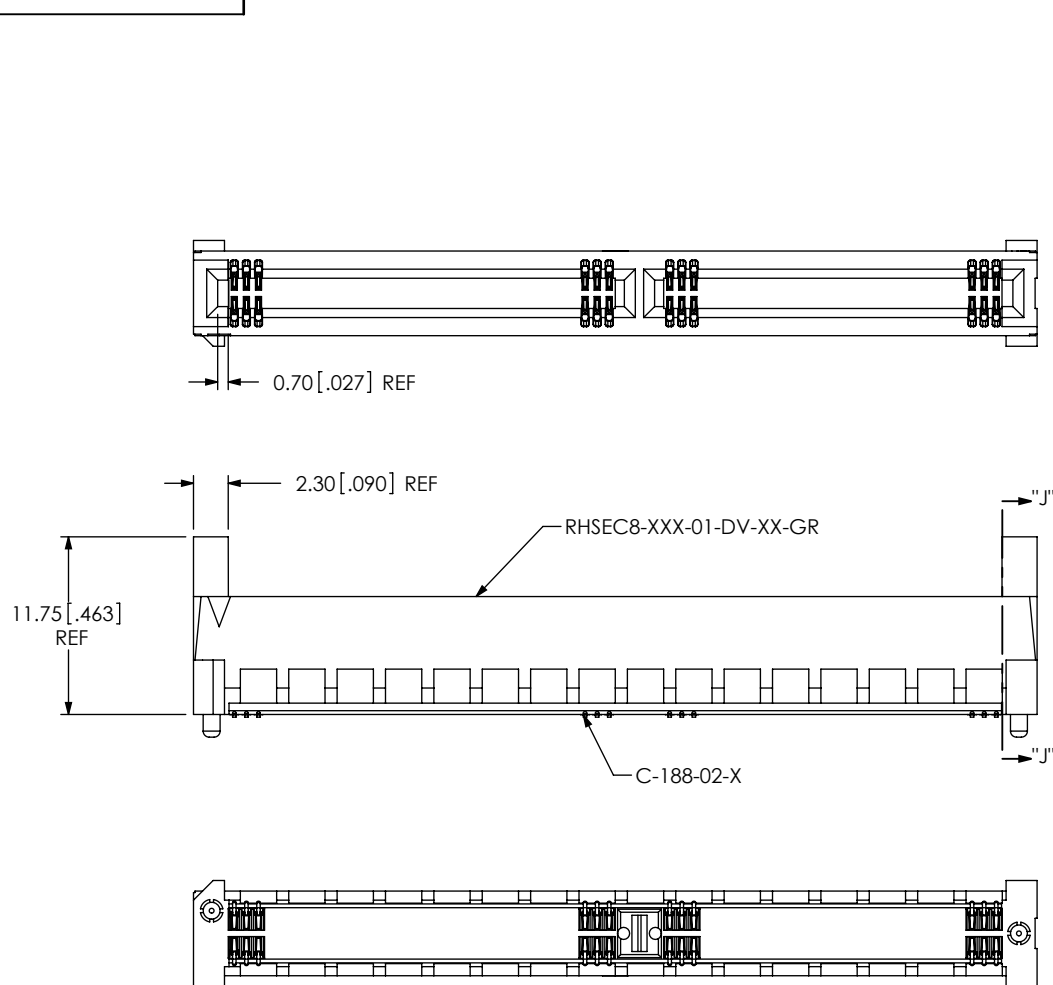


FIG 6
 **GR: GUIDE RAILS OPTION
 HSEC8-160-01-XX-DV-A-GR SHOWN
 AVAILABLE IN -10, -20, -30, -40, -50, & -60 POSITIONS ONLY
 (NOT AVAILABLE FOR -L; -BL TYPE USE)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)
 (SOME FEATURES NOT SHOWN FOR CLARITY)
 (** = AVAILABLE ONLY WITH -01 CARD THICKNESS)

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DWG. NO.
HSEC8-1XXX-XX-XX-DV-X-XX

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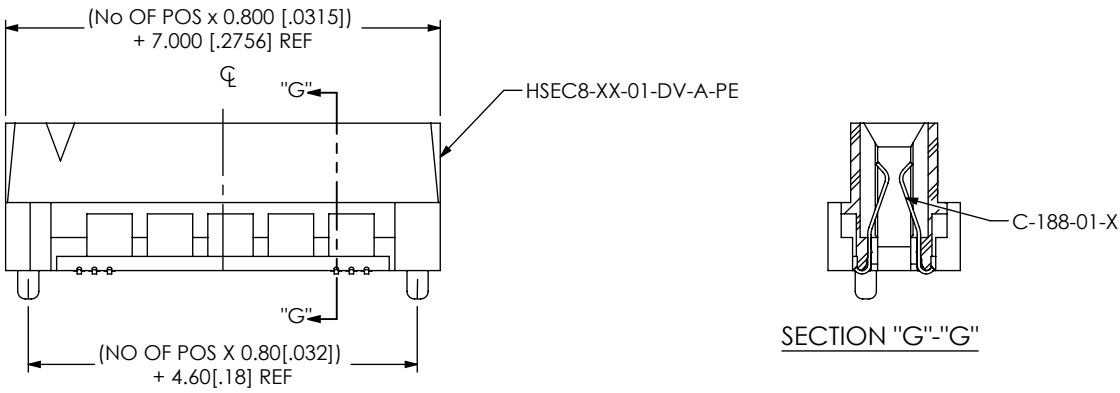


FIG 7
**-PE: PASS THROUGH OPTION
HSEC8-120-01-XX-DV-A-PE SHOWN
AVAILABLE IN -10, *-13 & -20 POSITIONS ONLY
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
(SOME FEATURES NOT SHOWN FOR CLARITY)
** = AVAILABLE ONLY WITH -01 CARD THICKNESS
*-13 IS A ONE BANK PART

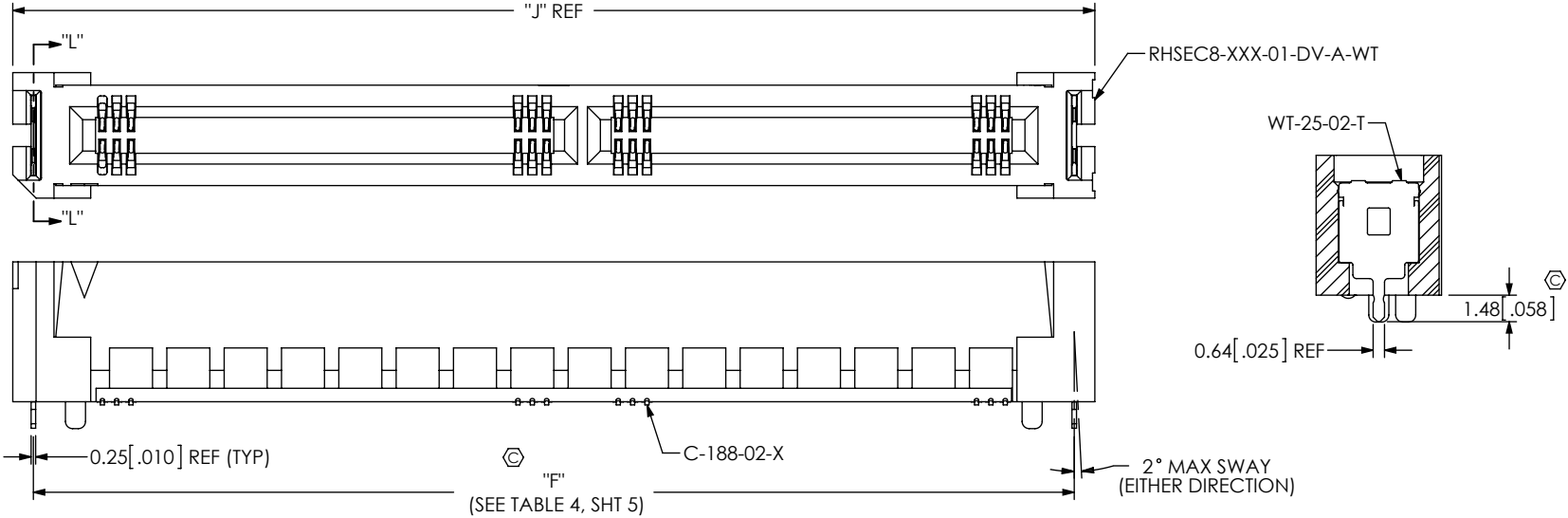


TABLE 7	
No OF POSITIONS	"J"
-09	19.60 [0.772]
-10	17.20 [0.677]
-13	22.80 [0.898]
-20	25.20 [0.992]
-25	32.40 [1.276]
-30	33.20 [1.307]
-37	42.00 [1.654]
-40	44.40 [1.748]
-49	51.60 [2.031]
-50	52.40 [2.063]
-60	60.40 [2.378]
-70	68.40 [2.693]
-80	76.40 [3.008]
-90	84.40 [3.323]
-100	92.40 [3.638]

FIG 8
**-WT: WELD TAB OPTION
HSEC8-160-01-XX-DV-A-WT SHOWN
AVAILABLE IN ALL POSITIONS
(-A OPTION REQUIRED)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)
(SOME FEATURES NOT SHOWN FOR CLARITY)
** = AVAILABLE ONLY WITH -01 CARD THICKNESS

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	DESCRIPTION: 0.8mm HIGH SPEED EDGE CARD ASSEMBLY	
	DWG. NO. HSEC8-1XXX-XX-XX-DV-X-XX	
BY: BRATCHER 01/24/03		SHEET 7 OF 8

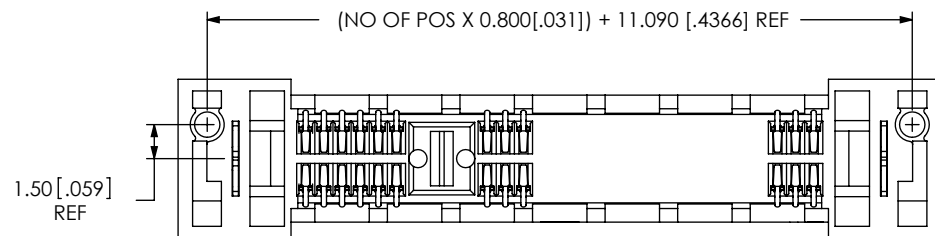
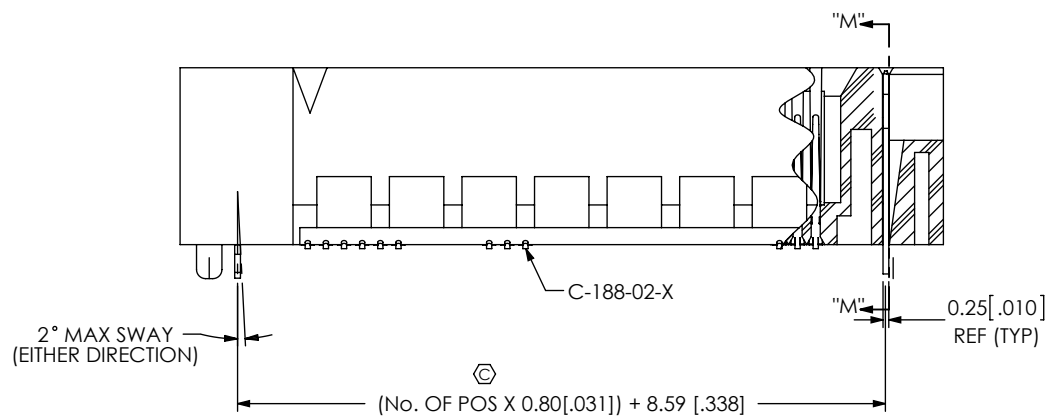
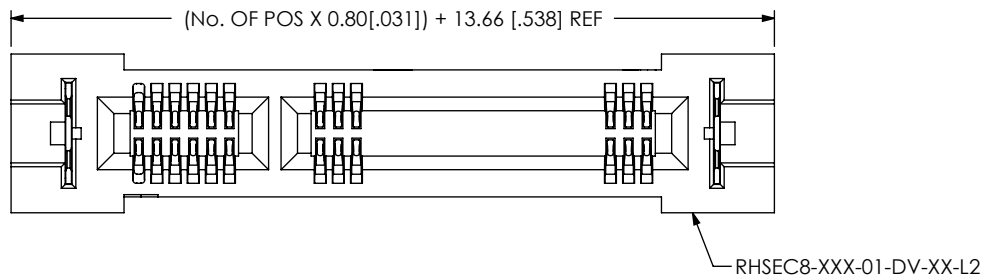
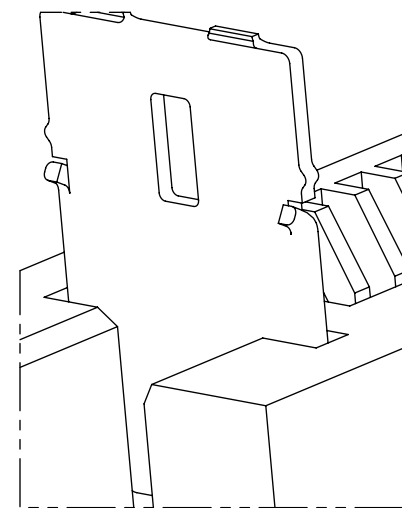
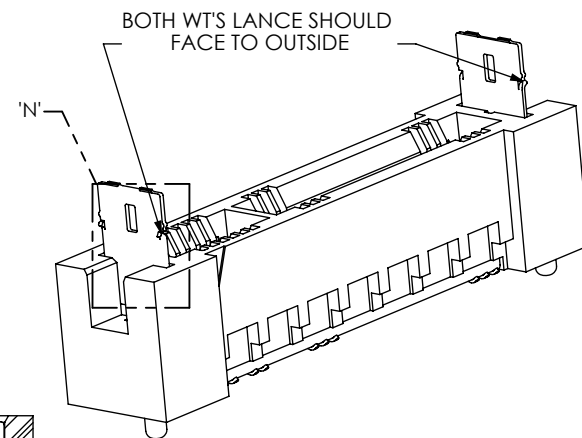
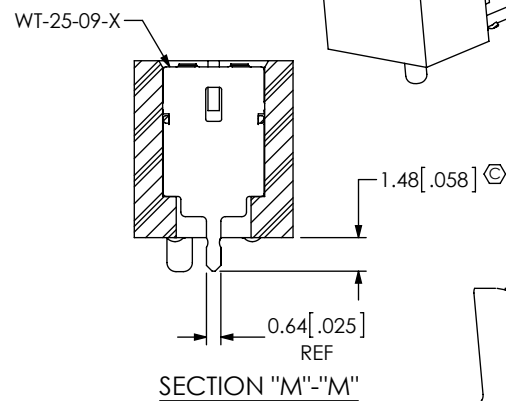


FIG 9
**-L2: ECDP LATCHING OPTION
HSEC8-125-01-XX-DV-A-L2 SHOWN
(AVAILABLE IN 9, 13, 25, & 49 POS ONLY)
(NOT AVAILABLE FOR -GR TYPE USE)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)
(SOME FEATURES NOT SHOWN FOR CLARITY)
(** = AVAILABLE ONLY WITH -01 CARD THICKNESS)



DETAIL 'N'
SCALE 10:1

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CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 3:1

samtec

520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code 55322

DESCRIPTION:
0.8mm HIGH SPEED EDGE CARD ASSEMBLY

DWG. NO.
HSEC8-1XXX-XX-XX-DV-X-XX

BY: BRATCHER 01/24/03

SHEET 8 OF 8