

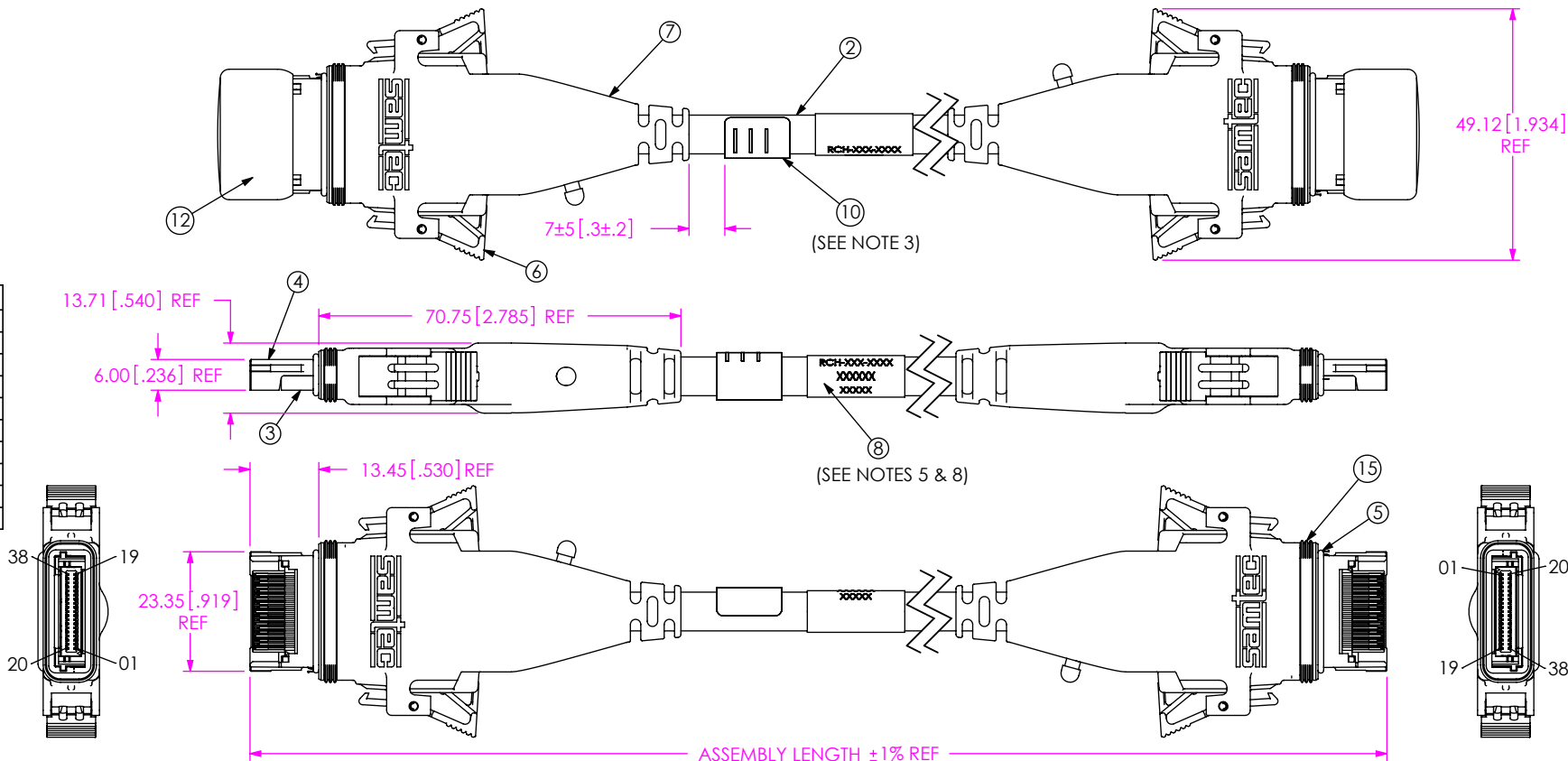
1. REPRESENTS A CRITICAL DIMENSION.
2. ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED FOR SHORTS AND OPENS.
3. ALL ASSEMBLIES TO BE HI-POT TESTED AT 300V.
AFTER FINAL ELECTRICAL TEST, LABEL EACH ASSEMBLY WITH 1 LABEL-ET.
4. ENSURE VCOV-EPLSP-XXX-ORG IS APPLIED AND PACKAGE IN CLEAR POLY-BAGS.
5. FOR FINISHED GOOD, HDRL-11 IS TO BE CENTERED ON CABLE AS SHOWN OR 1 FOR EVERY METER OF CABLE FOR ASSEMBLIES OVER 1 METER.
HDRL-11 IS TO CONTAIN: PART NUMBER, SHOP ORDER & DATE CODE.
6. THIS ASSEMBLY USES 32 AWG 100 OHM TWINAX.
7. MEASURE O-RING IN THE CENTER OF THE PART.
8. FOR SUB-RCH, ONLY ONE HDRL-11 LABEL IS REQUIRED, TO BE PLACED CENTERED ON THE CABLE.

No. OF POSITIONS
-019 = 19 POSITION (SEE TABLE 3) PIN 1 TO 1

ASSEMBLY LENGTH
(IN MILLIMETERS)
-0500 TO -9999
(-1000, -2000, AND -3000,
ARE STOCKED LENGTHS)
(SEE NOTE 6)

DO NOT
SCALE FROM
THIS PRINT

FIG 1
RCH-019-XXXX SHOWN
(SOME COMPONENTS NOT SHOWN IN ALL VIEWS FOR CLARITY)



LENGTH	"A"
500-1999	1
2000-2999	2
3000-3999	3
4000-4999	4
5000-5999	5
6000-6999	6
7000-7999	7
8000-8999	8
9000-9999	9

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY	MATERIAL
1	SUB-EPHSI-019-D-EM	SUB ASSEMBLY	2	SEE TITLE BLOCK
2	SUB-HSIO-32100-01-XXXX	BUNDLED 9 TWIN AX AND 5 POWER	1	SEE TITLE BLOCK
3	EPHSI-019-02	BOTTOM HOUSING EPHSI CONNECTOR	2	ZINC ALLOY
4	EPHSI-019-01	TOP HOUSING EPHSI CONNECTOR	2	ZINC ALLOY
5	OR-129-01	EMI GASKET FOR RCH	2	SILVER/ALUMINUM
6	LTC-28	PESS PLASTIC LATCH	4	PA66 RG001, BLACK
7	MD-NYL-ZY-70G13-BK	OVERMOLD	0.047 lbs	NYLON, ZYTEL, 70G13, BLACK
8	HDRL-11	LABEL	"A"	SELF LAMINATING VINYL
9	CUT-0.250	COPPER FOIL TAPE	4	COPPER FOIL, CONDUCTIVE ADHESIVE
10	LABEL-ET	PRINTED LABEL	1	VINYL
11	RVT-02.3-09.5-002	EPLSP RIVET	4	ALUM. SEMI-TUBULAR PLAIN FINISH
12	VCOV-EPLSP-019-ORG	PROTECTIVE COVER	2	VINYL
13	VCOV-EPLSP-019-ORG-PR	PROTECTIVE COVER	2	VINYL
14	SUB-SRP-065-015-01-00.48	SOLDER PREFORM	4	SAC 305
15	OR-121-01	O-RING	2	NBR+SILICONE OIL
16	EPHSI-SR-01	EPHSI STRAIN RELIEF	2	RUBBER
17	MD-NYL-L-MA-OM646-BK	PREMOLD	0.0022 lbs	NYLON, LOW PRESSURE, BLACK
18	OCS-137285-01-PP	KAPTON TAPE	2	KAPTON
19	EPLSP-GR-19	GROUND-RING	2	316L STAINLESS STEEL

F:\DWG\MISC\MKTG\RCH-XXX-XXXX-MLT.SLDDRW

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES ARE:

DECIMALS ANGLES
X.X: ± 0.3 2°
X.XX: ± 0.13
X.XXX: ± 0.051

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2:1
INSULATOR: HIGH TEMP NYLON
TERMINALS: CU ALLOY
MAX FLASH ALLOWED: .05[.002]
MAX GATE VESTIGE: .10[.004]

CABLE MATERIAL: JACKET: PVC
INSULATOR: DIELECTRIC
CONDUCTORS: COPPER
BRAID: TINNED COPPER
FOIL: ALUMINUM/POLYESTER

THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

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:
SEALED EPLSP CABLE ASSEMBLY

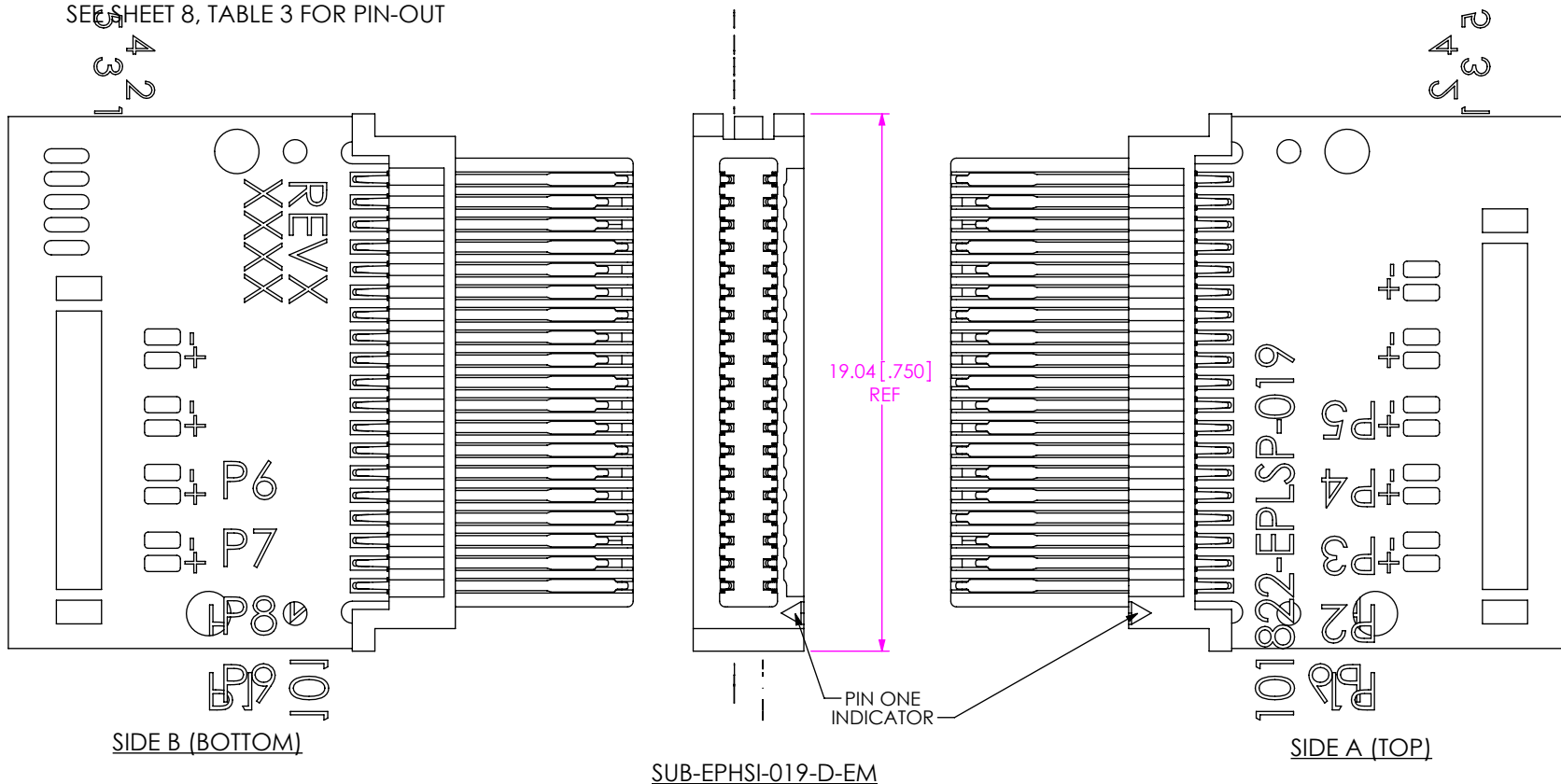
DWG. NO.
RCH-XXX-XXXX

BY: D. SCHMELZ 07/15/2010 SHEET 1 OF 8

TABLE 2 -19 CABLE PAIR LOCATION												
PAIR 1		PAIR 2		PAIR 3		PAIR 4		PAIR 5		(PCB PAIR)		
P4+	P4-	P5+	P5-	P6+	P6-	P7+	P7-	P8+	P8-	(CABLE PAIR)		
POS	NEG	POS	NEG	POS	NEG	POS	NEG	POS	NEG			
POS	NEG	POS	NEG	POS	NEG	POS	NEG	GREEN	BLUE	ORANGE	PURPLE	WHITE
P2+	P2-	P3+	P3-	P1+	P1-	P9+	P9-	1	2	3	4	5
PAIR 6		PAIR 7		PAIR 8		PAIR 9		DISCRETES				

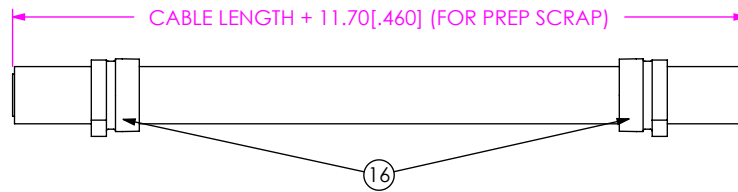
(END 1 TWINAX PRINTING MUST FACE UP, END 2 TWINAX PRINTING MUST FACE DOWN)

SEE SHEET 8, TABLE 3 FOR PIN-OUT

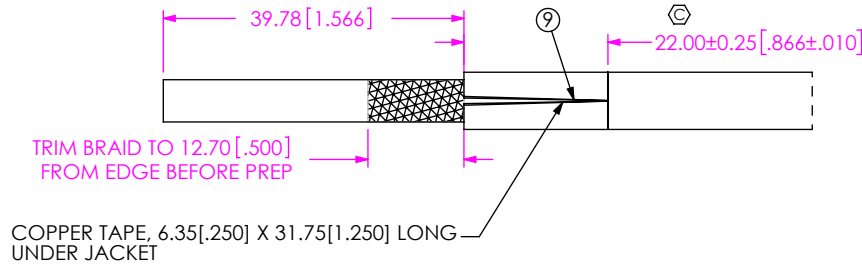


SUB-EPHSI-019-D-EM

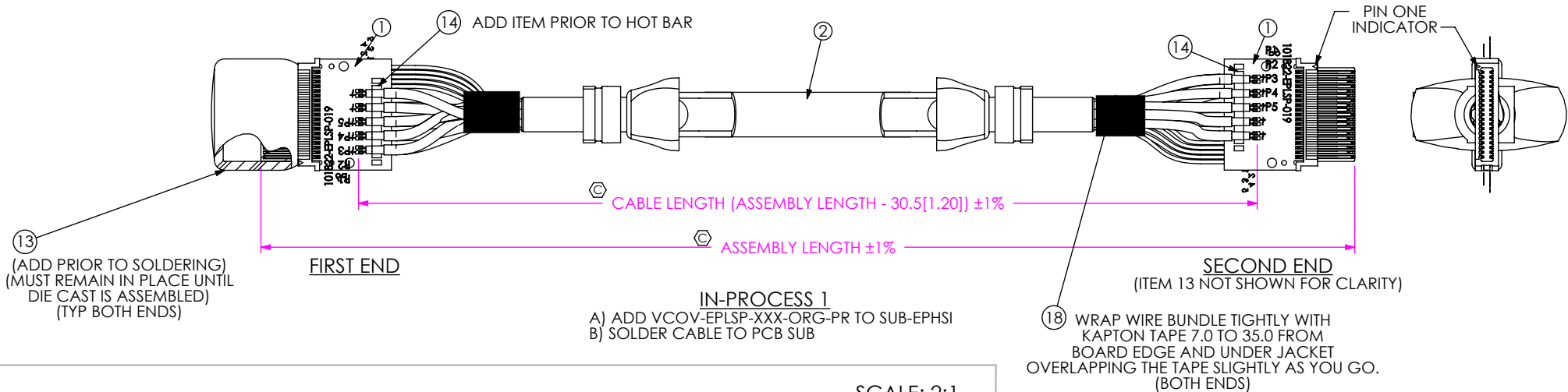
<p>PROPRIETARY NOTE</p> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.</p>	<p>samtec</p> <p>520 PARK EAST BLVD, NEW ALBANY, IN 47150 PHONE: 812-944-6733 FAX: 812-948-5047 e-Mail: info@SAMTEC.com code: 55322</p>	
	<p>DO NOT SCALE DRAWING</p>	<p>DESCRIPTION: SEALED EPLSP CABLE ASSEMBLY</p>
<p>SHEET SCALE: 2:1</p>	<p>DWG. NO. RCH-XXX-XXXX</p>	
<p>BY: D. SCHMELZ 07/15/2010 SHEET 2 OF 8</p>		



CUT CABLE TO LENGTH
 SLIDE EPHSI-SR-01 ONTO CABLE BEFORE STRIPPING INSULATION



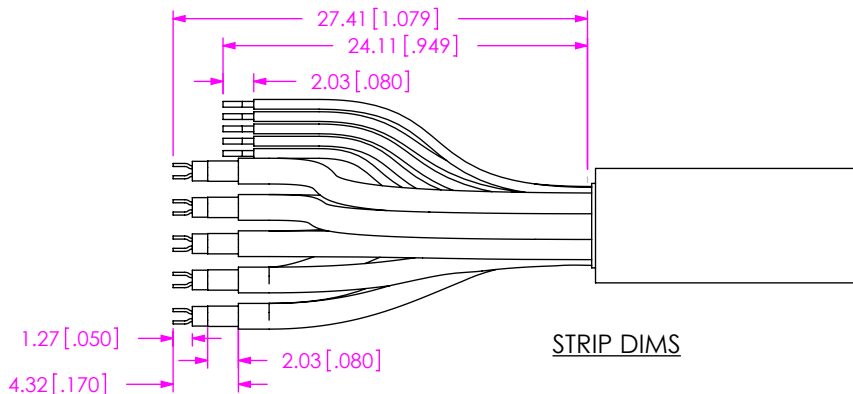
WRAP BRAID WITH COPPER TAPE BEFORE FOLDING BACK
 (TYP BOTH ENDS)



13 (ADD PRIOR TO SOLDERING)
 (MUST REMAIN IN PLACE UNTIL
 DIE CAST IS ASSEMBLED)
 (TYP BOTH ENDS)

IN-PROCESS 1
 A) ADD VCOV-EPLSP-XXX-ORG-PR TO SUB-EPHSI
 B) SOLDER CABLE TO PCB SUB

18 WRAP WIRE BUNDLE TIGHTLY WITH
 KAPTON TAPE 7.0 TO 35.0 FROM
 BOARD EDGE AND UNDER JACKET
 OVERLAPPING THE TAPE SLIGHTLY AS YOU GO.
 (BOTH ENDS)



SCALE: 2:1

PROPRIETARY NOTE
 * THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.



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

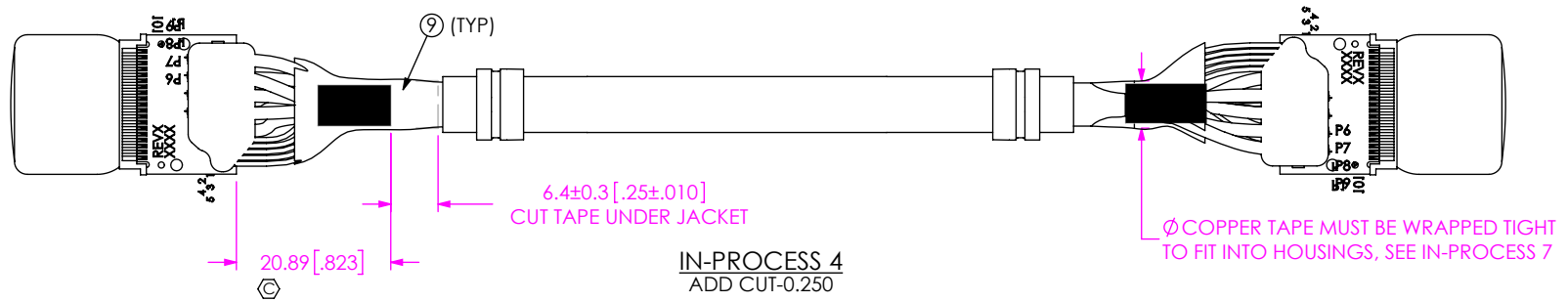
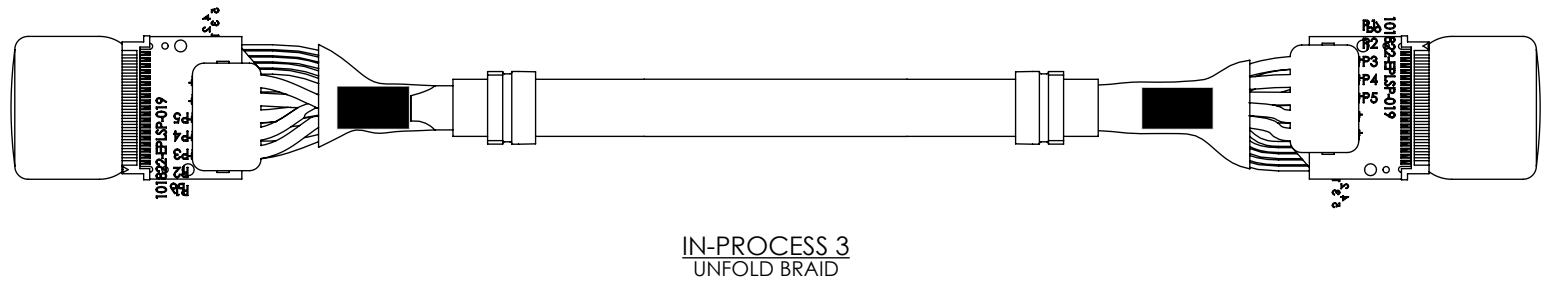
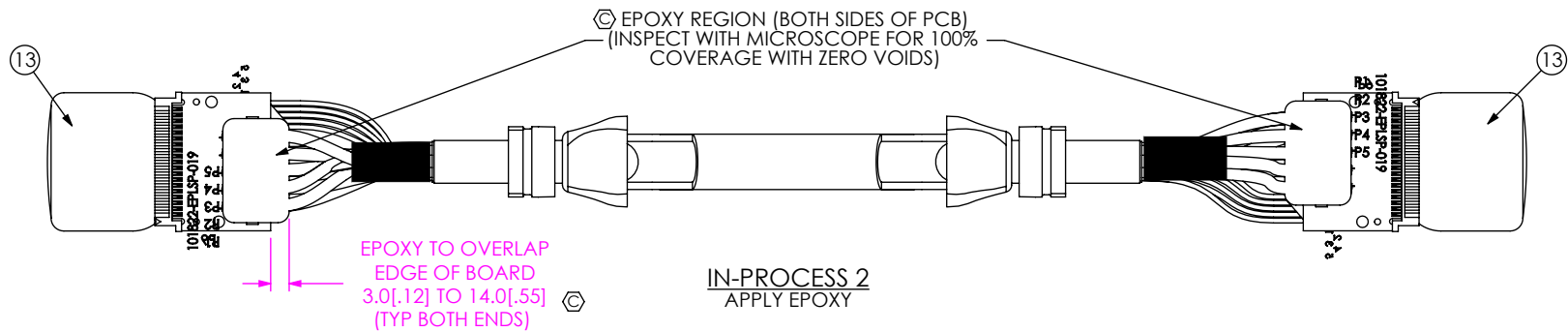
DO NOT SCALE DRAWING


DESCRIPTION:
 SEALED EPLSP CABLE ASSEMBLY

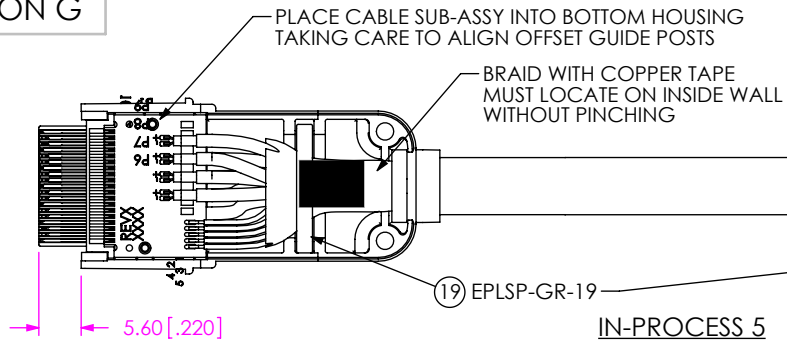
DWG. NO.
RCH-XXX-XXXX

SHEET SCALE: 1:1

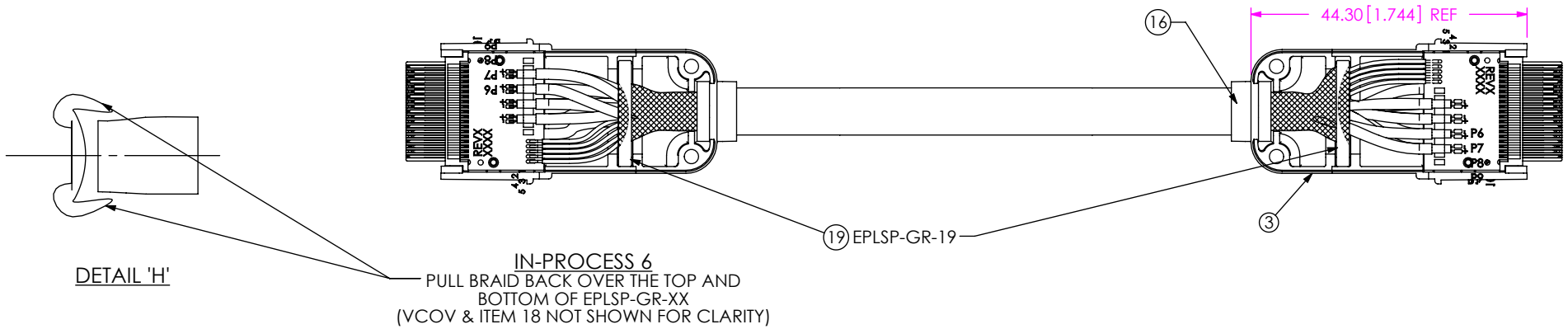
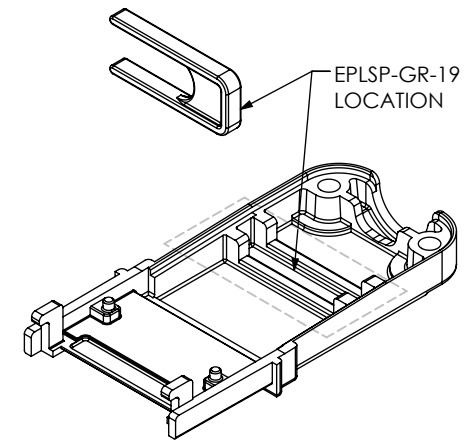
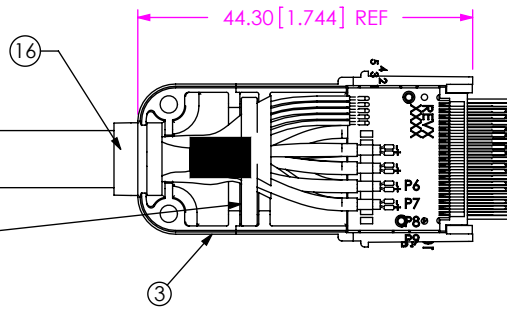
BY: D. SCHMELZ 07/15/2010 SHEET 3 OF 8



<p>PROPRIETARY NOTE</p> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.</p>	 <p>520 PARK EAST BLVD, NEW ALBANY, IN 47150 PHONE: 812-944-6733 FAX: 812-948-5047 e-Mail: info@SAMTEC.com code: 55322</p>	
	<p>DO NOT SCALE DRAWING</p> <p>SHEET SCALE: 1:1</p>	<p>DESCRIPTION: SEALED EPLSP CABLE ASSEMBLY</p> <p>DWG. NO. RCH-XXX-XXXX</p> <p>BY: D. SCHMELZ 07/15/2010 SHEET 4 OF 8</p>

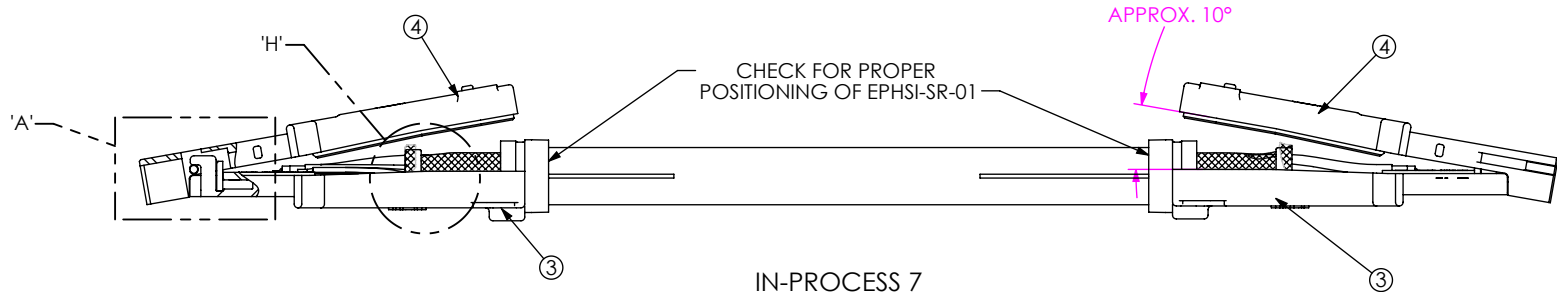


IN-PROCESS 5
 ADD EPHSI-019-02
 LOCATE STRAIN RELIEF IN HOUSING
 AND ADD EPLSP-GR-19
 (REMOVE ITEM 13 FOR HOUSING ASSEMBLY)



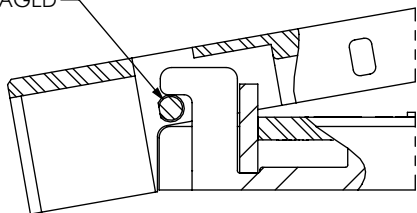
DETAIL 'H'

IN-PROCESS 6
 PULL BRAID BACK OVER THE TOP AND
 BOTTOM OF EPLSP-GR-XX
 (VCOV & ITEM 18 NOT SHOWN FOR CLARITY)



IN-PROCESS 7
 ADD EPHSI-019-01
 (REMOVE ITEM 13 FOR HOUSING ASSEMBLY)

WHILE POSITIONING THE TOP COVER (EPHSI-019-01)
 INSURE THAT LATCH AND PIN
 ARE ENGAGED



DETAIL 'A'
 SCALE 3 : 1

PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS CONFIDENTIAL AND
 PROPRIETARY INFORMATION AND ALL DESIGN,
 MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS
 AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC,
 INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE
 OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR
 REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY
 OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS
 WRITTEN CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 1:1

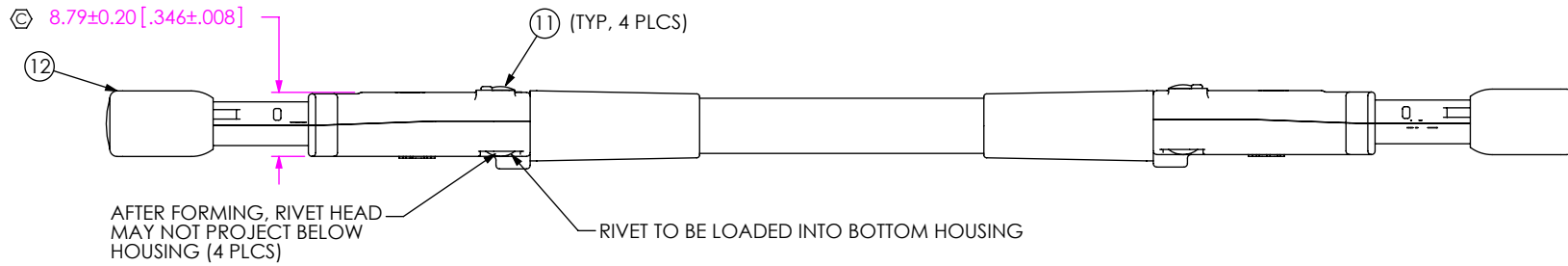


520 PARK EAST BLVD, NEW ALBANY, IN 47150
 PHONE: 812-944-6733 FAX: 812-948-5047
 e-Mail: info@SAMTEC.com code: 55322

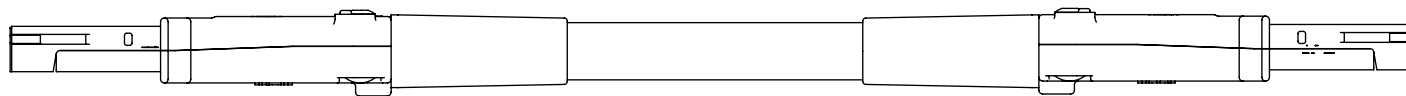
DESCRIPTION:
 SEALED EPLSP CABLE ASSEMBLY

DWG. NO.
 RCH-XXX-XXXX


BY: D. SCHMELZ 07/15/2010 SHEET 5 OF 8

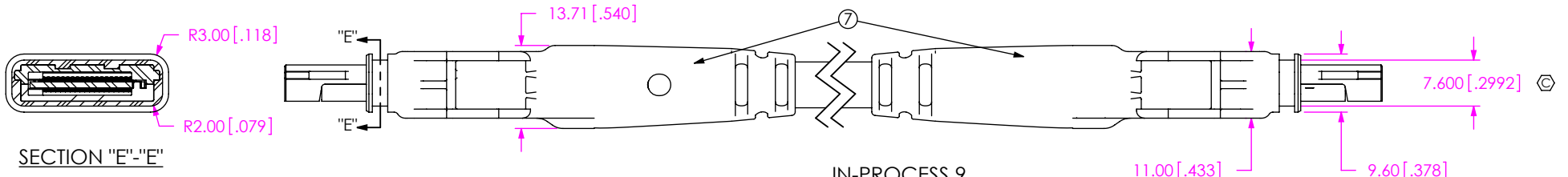
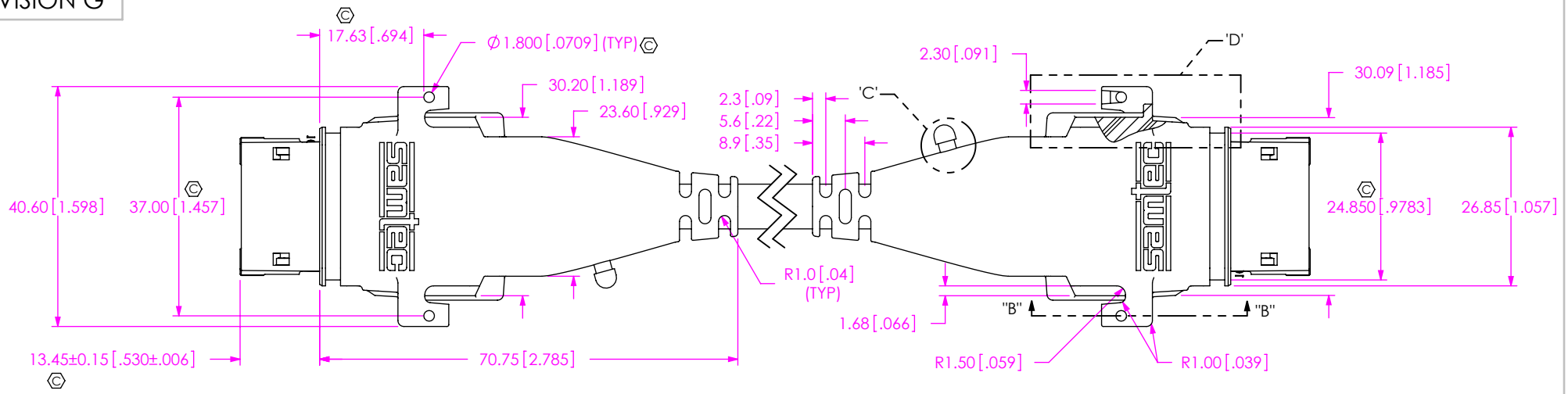


IN-PROCESS 8
 A) ADD RVT-02.3-09.5-002
 B) ADD ITEM 12, VCOV-EPLSP-ORG

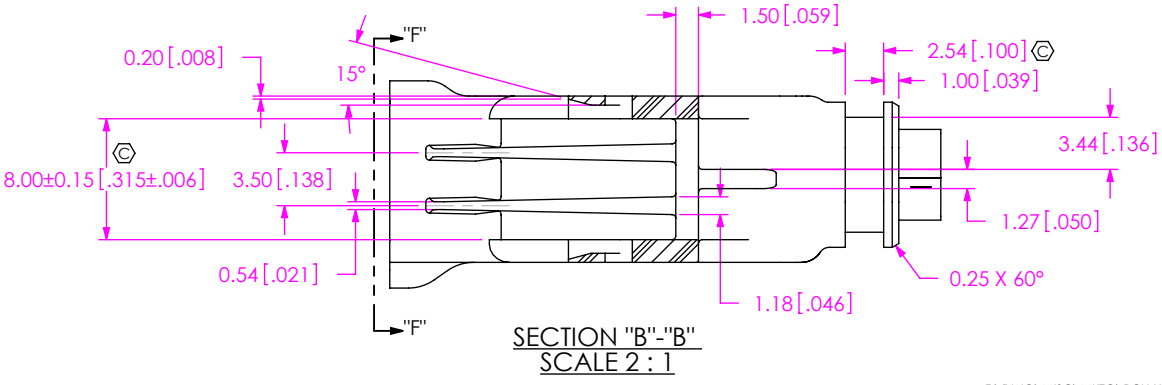
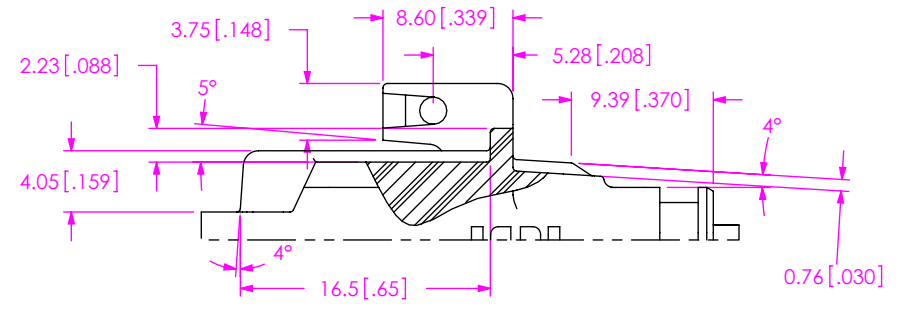
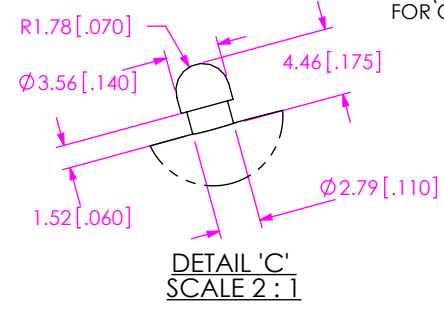
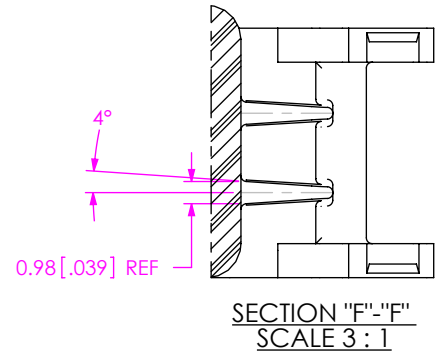


IN-PROCESS 9
 FORM RIVET

<p>PROPRIETARY NOTE</p> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.</p>	 <p>520 PARK EAST BLVD, NEW ALBANY, IN 47150 PHONE: 812-944-6733 FAX: 812-948-5047 e-Mail: info@SAMTEC.com code: 55322</p>	
	<p>DO NOT SCALE DRAWING</p>	<p>DESCRIPTION: SEALED EPLSP CABLE ASSEMBLY</p>
	<p>SHEET SCALE: 1:1</p>	<p>DWG. NO. RCH-XXX-XXXX</p> <p>BY: D. SCHMELZ 07/15/2010 SHEET 6 OF 8</p>



IN-PROCESS 9
OVERMOLD
(REMOVE ITEM 12, VCOV-EPLSP-ORG,
FOR OVERMOLDING PROCESS THEN REPLACE)

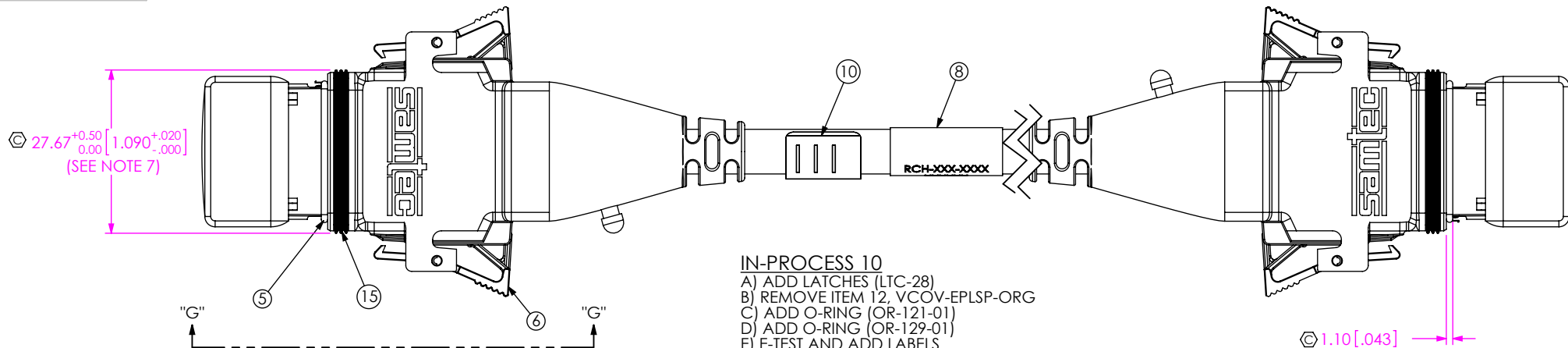


PROPRIETARY NOTE
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

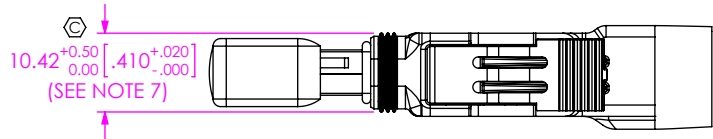
samtec
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

DO NOT SCALE DRAWING
SHEET SCALE: 1:1

DESCRIPTION:
SEALED EPLSP CABLE ASSEMBLY
DWG. NO.
RCH-XXX-XXXX
BY: D. SCHMELZ 07/15/2010 SHEET 7 OF 8



- IN-PROCESS 10**
 A) ADD LATCHES (LTC-28)
 B) REMOVE ITEM 12, VCOV-EPLSP-ORG
 C) ADD O-RING (OR-121-01)
 D) ADD O-RING (OR-129-01)
 E) E-TEST AND ADD LABELS
 F) REPLACE ITEM 12, VCOV-EPLSP-ORG



SECTION "G"-"G"

TABLE 3 (PIN OUT)

END 1	SIGNAL	END 2		END 1	SIGNAL	END 2	
1	GND	1		20	GND	20	
2	SIGNAL	2	PAIR	21	SIGNAL	21	PAIR
3	SIGNAL	3		22	SIGNAL	22	
4	GND	4		23	GND	23	
5	SIGNAL	5	PAIR	24	SIGNAL	24	PAIR
6	SIGNAL	6	PAIR	25	SIGNAL	25	PAIR
7	GND	7		26	GND	26	
8	SIGNAL	8	PAIR	27	SIGNAL	27	PAIR
9	SIGNAL	9	PAIR	28	SIGNAL	28	PAIR
10	GND	10		29	GND	29	
11	SIGNAL	11	PAIR	30	SIGNAL	30	PAIR
12	SIGNAL	12	PAIR	31	SIGNAL	31	PAIR
13	GND	13		32	GND	32	
14	SIGNAL	14	PAIR	33	SIGNAL	33	P
15	SIGNAL	15	PAIR	34	SIGNAL	34	P
16	GND	16		35	GND	35	
17	SIGNAL	17	P	36	SIGNAL	36	P
18	SIGNAL	18	P	37	N/C	37	
19	GND	19		38	GND	38	

PROPRIETARY NOTE
 * THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

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

DO NOT SCALE DRAWING

 SHEET SCALE: 1:1

DESCRIPTION:
 SEALED EPLSP CABLE ASSEMBLY
 DWG. NO. RCH-XXX-XXXX
 BY: D. SCHMELZ 07/15/2010 SHEET 8 OF 8