REVISION G

DO NOT SCALE FROM THIS PRINT

NOTES:

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.

DESIGNED & DIMENSIONED IN MILLIMETERS

RCH-XXX-XXXX

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)

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

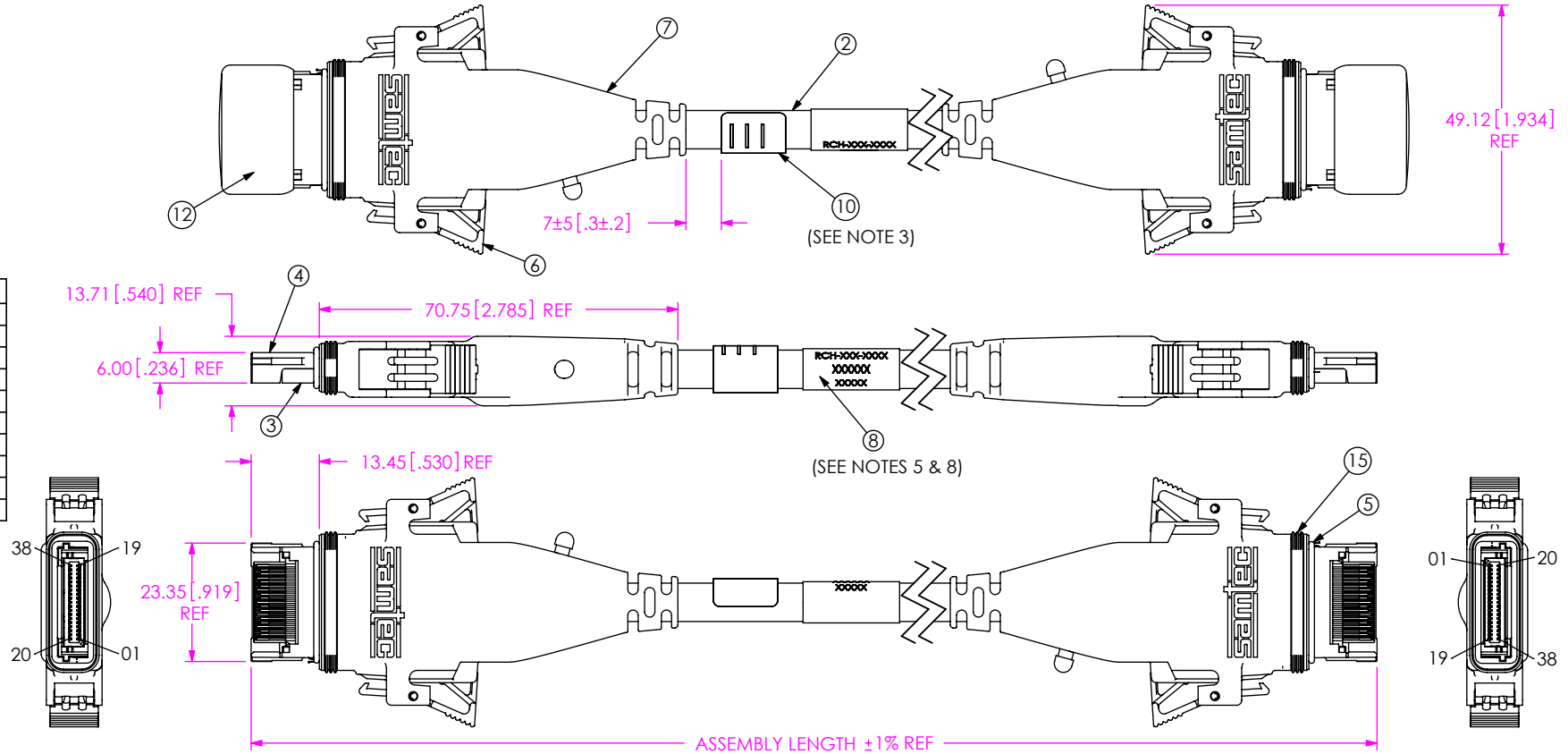


TABLE 1	
LENGTH	"A"
500-1999	1
2000-2999	2
3000-3999	3
4000-4999	4
5000-5999	5
6000-6999	6
7000-7999	7
8000-8999	8
9000-9999	9

RCH-XXX-XXXX BOM

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-MA-OM646-BK	PREMOLD	0.0022 lbs	NYLON, LOW PRESSURE, BLACK
18	CCS-137285-01-PP	KAPTON TAPE	2	KAPTON
19	EPLSP-GR-19	GROUND-RING	2	316L STAINLESS STEEL

THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

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

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS.
TOLERANCES ARE:
DECIMALS: X.X: ±0.3, X.XX: ±0.13, X.XXX: ±0.051
ANGLES: 2°

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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

MATERIAL:
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

DO NOT SCALE DRAWING

SHEET SCALE: 2:1

DESCRIPTION:
SEALED EPLSP CABLE ASSEMBLY

DWG. NO.
RCH-XXX-XXXX

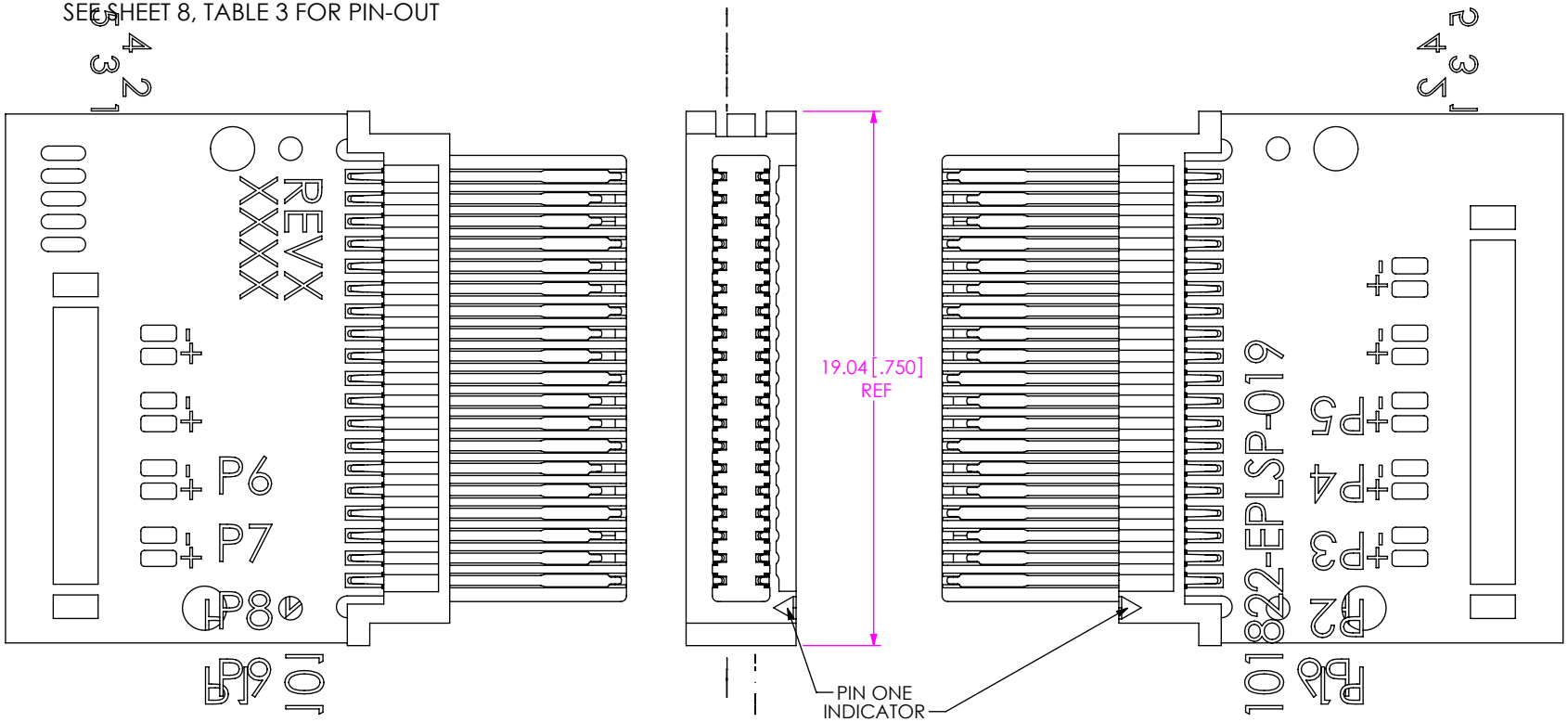
BY: D. SCHMELZ 07/15/2010

SHEET 1 OF 8

REVISION G

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



SIDE B (BOTTOM)

SUB-EPHSI-019-D-EM

SIDE A (TOP)

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SHEET SCALE: 2:1

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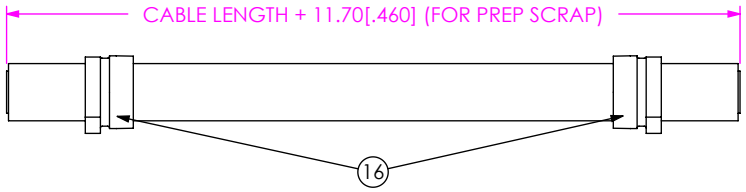
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:
SEALED EPLSP CABLE ASSEMBLY

DWG. NO.
RCH-XXX-XXXX

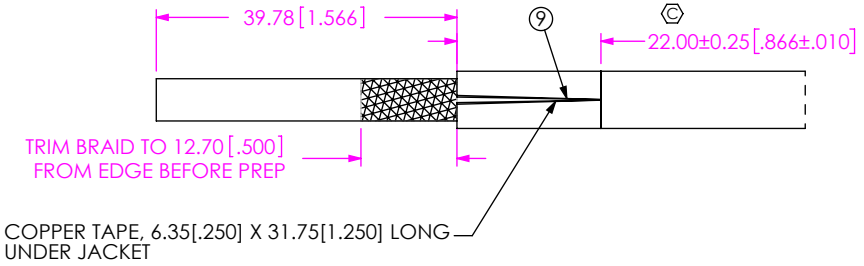
BY: D. SCHMELZ 07/15/2010 SHEET 2 OF 8

REVISION G



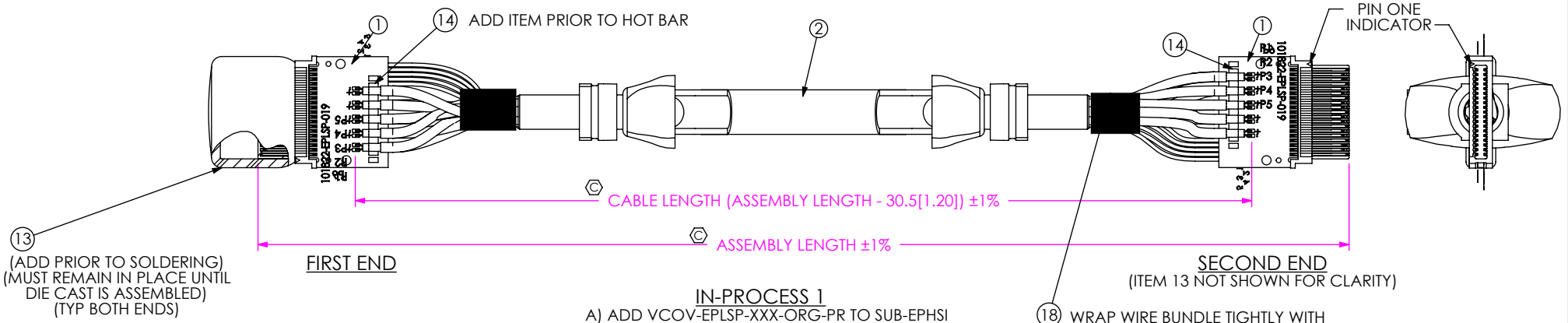
CUT CABLE TO LENGTH

SILIDE EPHSI-SR-01 ONTO CABLE BEFORE STRIPPING INSULATION



WRAP BRAID WITH COPPER TAPE
BEFORE FOLDING BACK

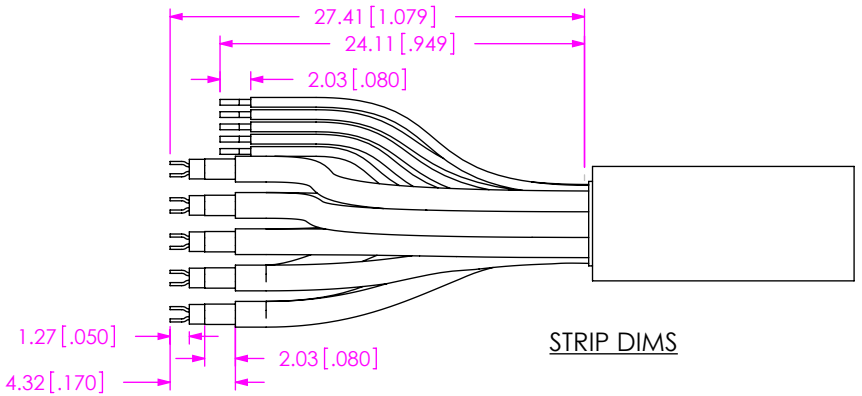
(TYP BOTH ENDS)



IN-PROCESS 1

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

SCALE: 2:1



STRIP DIMS

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SHEET SCALE: 1:1

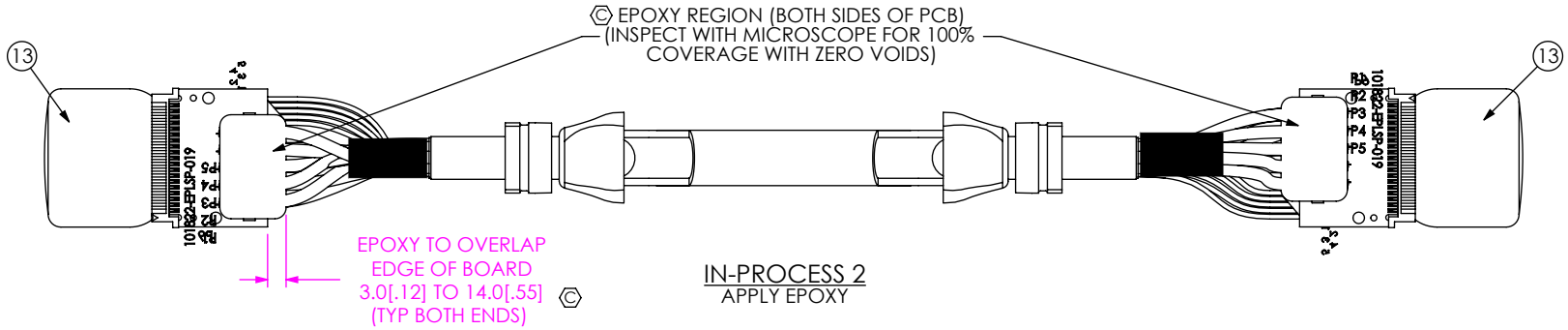
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:
SEALED EPLSP CABLE ASSEMBLY

DWG. NO.
RCH-XXX-XXXX

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

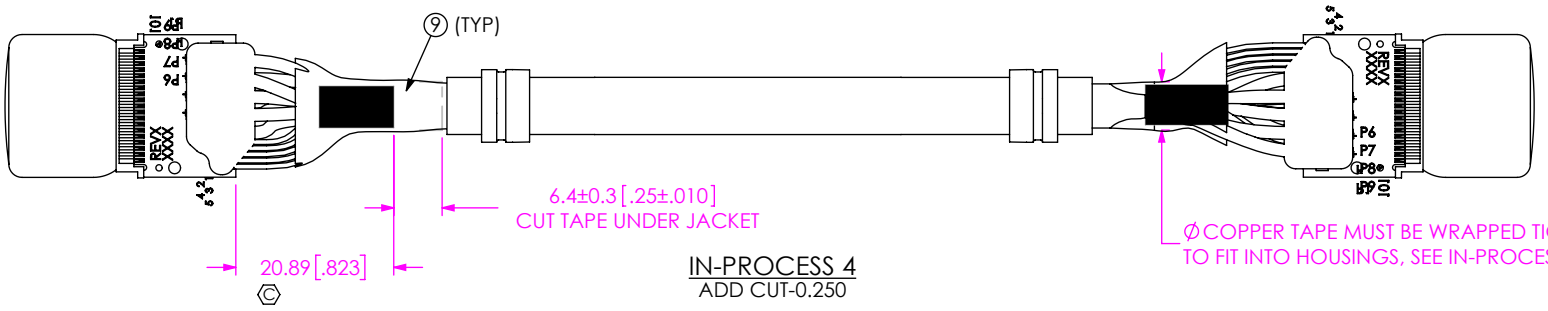
REVISION G



IN-PROCESS 2
APPLY EPOXY



IN-PROCESS 3
UNFOLD BRAID



IN-PROCESS 4
ADD CUT-0.250

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

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SHEET SCALE: 1:1

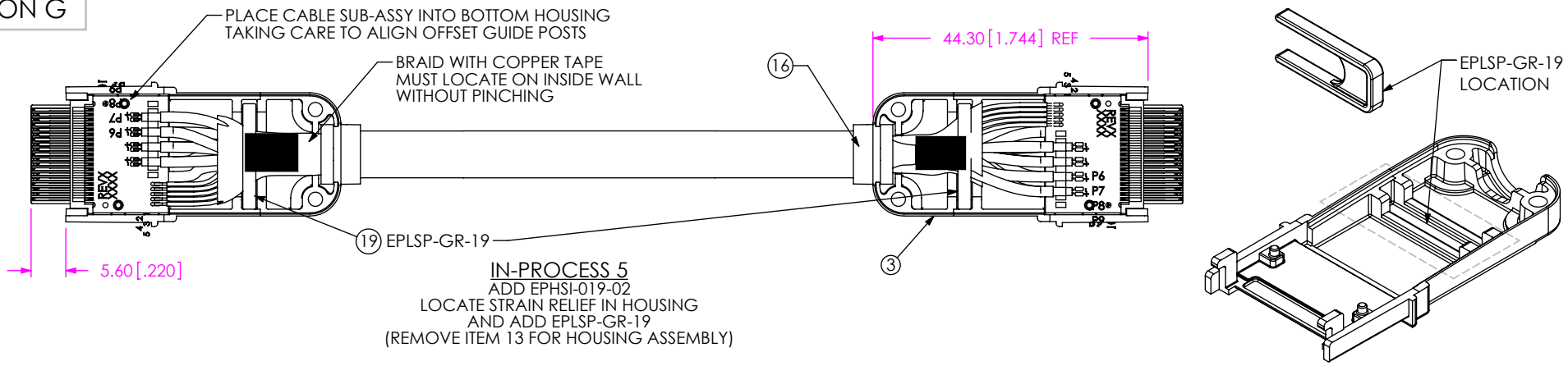
DESCRIPTION:
SEALED EPLSP CABLE ASSEMBLY

DWG. NO.
RCH-XXX-XXXX

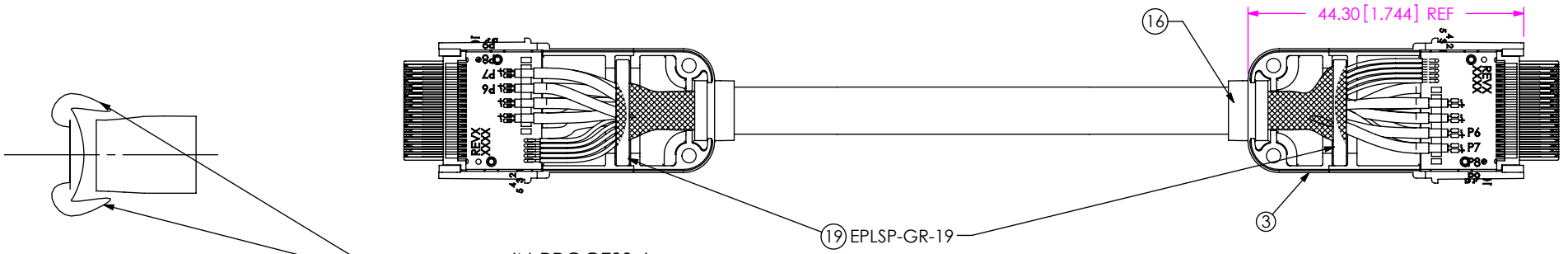
BY: D. SCHMELZ 07/15/2010 SHEET 4 OF 8

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

REVISION G

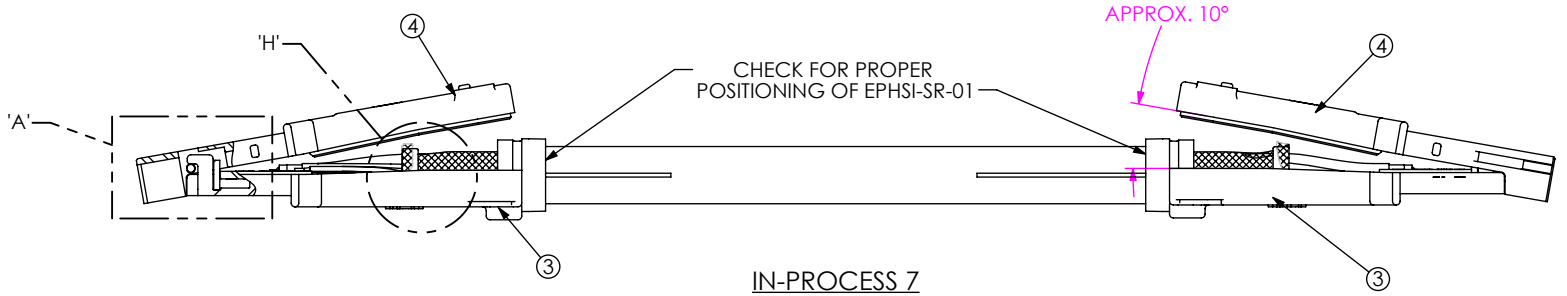


IN-PROCESS 5
ADD EPHSI-019-02
LOCATE STRAIN RELIEF IN HOUSING
AND ADD EPLSP-GR-19
(REMOVE ITEM 13 FOR HOUSING ASSEMBLY)



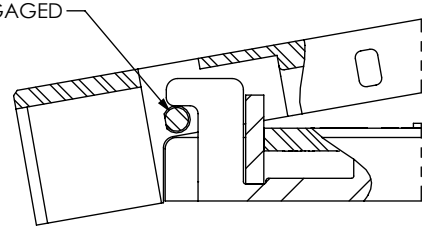
DETAIL 'H'

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

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SHEET SCALE: 1:1

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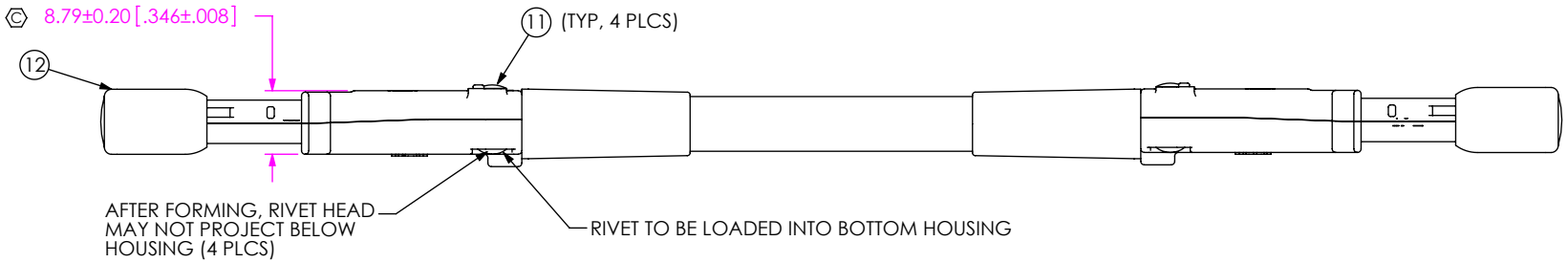
samtec
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:
SEALED EPLSP CABLE ASSEMBLY

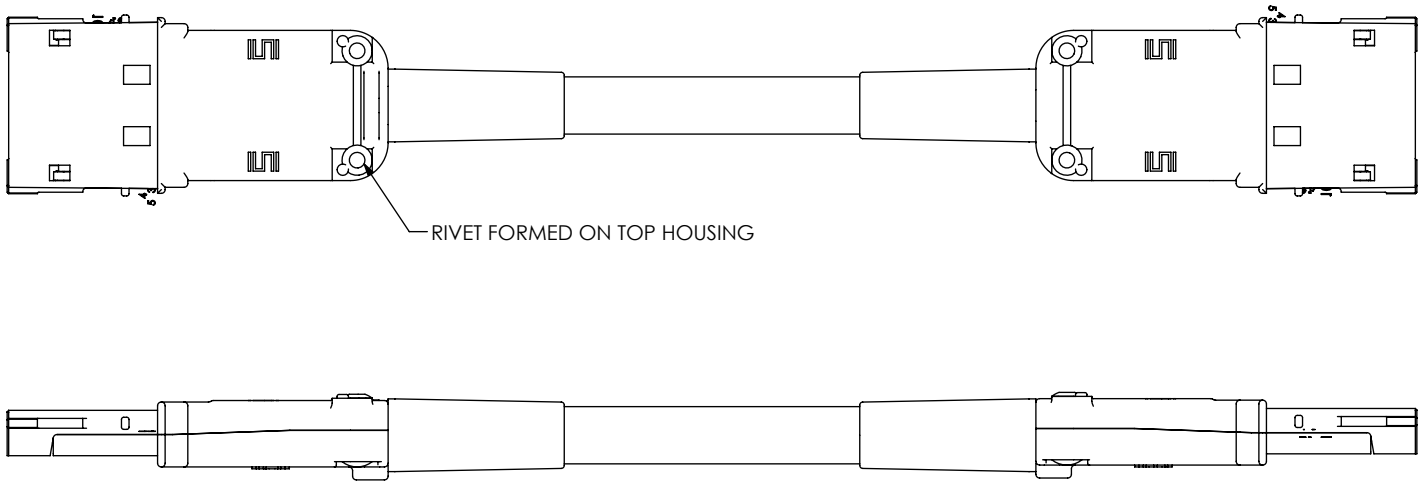
DWG. NO.
RCH-XXX-XXXX

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

REVISION G



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



IN-PROCESS 9
FORM RIVET

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DO NOT SCALE DRAWING

SHEET SCALE: 1:1

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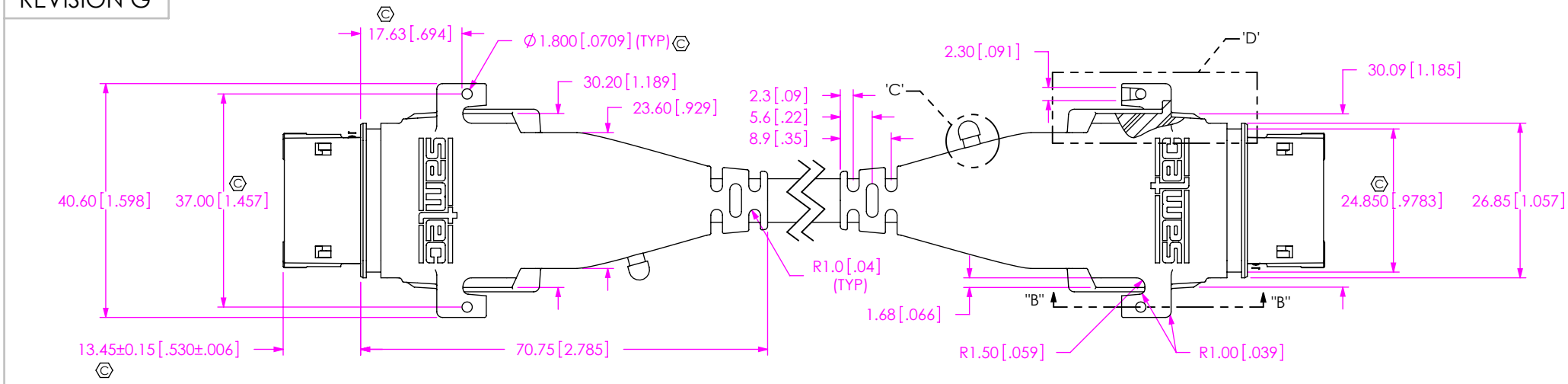
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

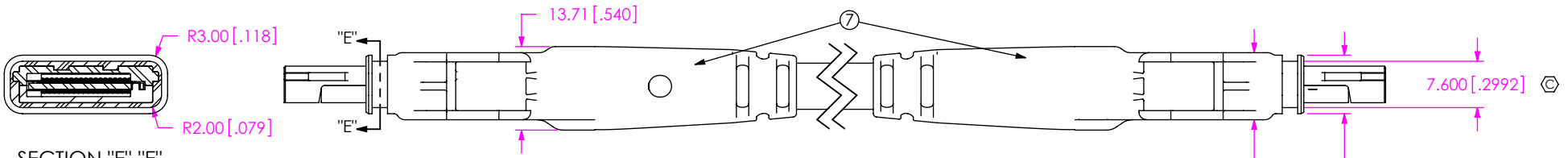
DESCRIPTION:
SEALED EPLSP CABLE ASSEMBLY

DWG. NO.
RCH-XXX-XXXX

BY: D. SCHMELZ 07/15/2010

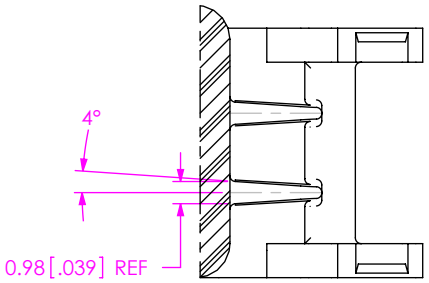
REVISION G



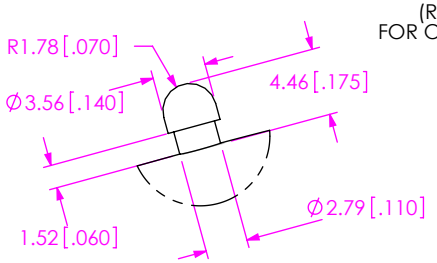


SECTION "E"-"E"

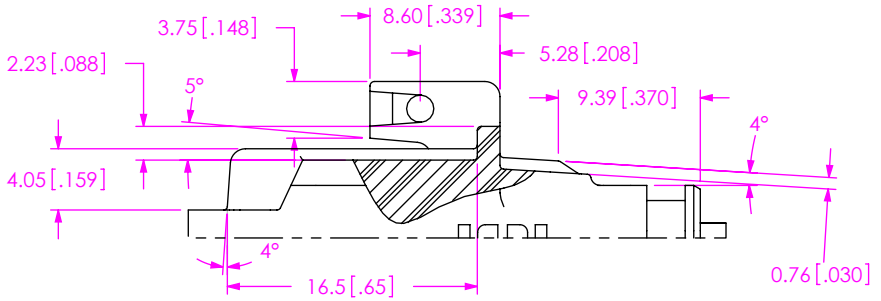
IN-PROCESS 9
OVERMOLD
(REMOVE ITEM 12, VCOV-EPLSP-ORG,
FOR OVERMOLDING PROCESS THEN REPLACE)



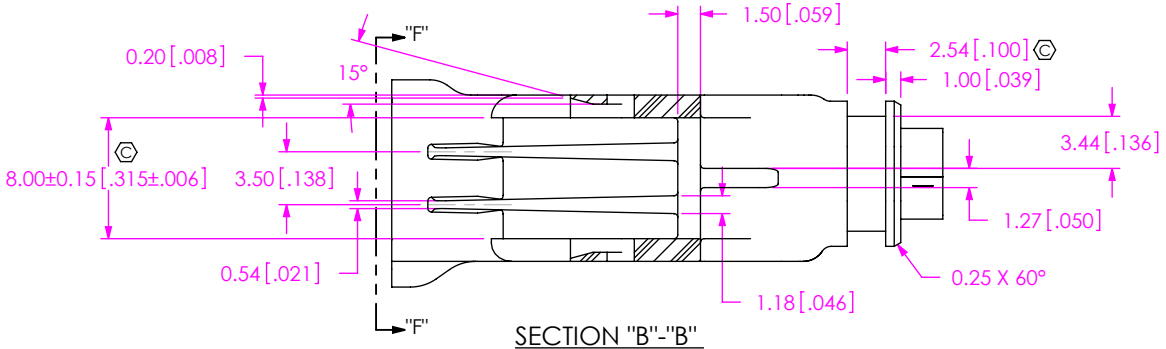
SECTION "F"-"F"
SCALE 3 : 1



DETAIL 'C'
SCALE 2 : 1



DETAIL 'D'
SCALE 2 : 1



SECTION "B"-"B"
SCALE 2 : 1

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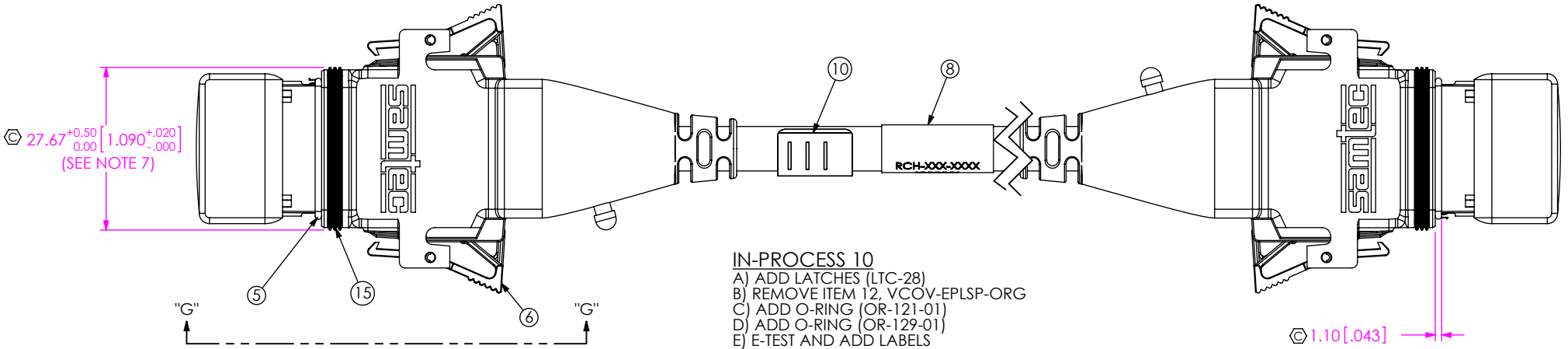
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:
SEALED EPLSP CABLE ASSEMBLY

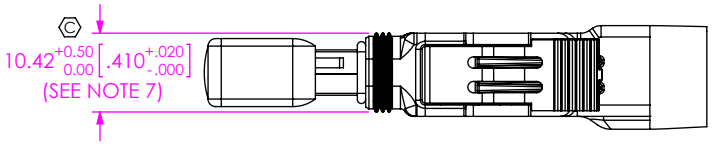
DWG. NO.
RCH-XXX-XXXX

BY: D. SCHMELZ 07/15/2010 SHEET 7 OF 8

REVISION G



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		25	SIGNAL	25	
7	GND	7		26	GND	26	
8	SIGNAL	8	PAIR	27	SIGNAL	27	PAIR
9	SIGNAL	9		28	SIGNAL	28	
10	GND	10		29	GND	29	
11	SIGNAL	11	PAIR	30	SIGNAL	30	PAIR
12	SIGNAL	12		31	SIGNAL	31	
13	GND	13		32	GND	32	
14	SIGNAL	14	PAIR	33	SIGNAL	33	P
15	SIGNAL	15		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	

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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

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

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