

DO NOT SCALE FROM THIS PRINT

TABLE 2			
ITEM	COMPONENT	PART NUMBER	QUANTITY
1	HEADER	BAR-J-22	1
2	CABLE ASSEMBLY	BE25S-XXXXX-XX-X-02-XXXX (SEE TABLE 4 & 5, SHEET 2)	11
3	E-TEST LABEL	LABEL-ET	1
4	POSITION LABEL	HDRL-16	22
5	ITEM DELETED		
6	ESD BAG 1	BG-09-12	1
7	ESD BAG 2	BG-04-06-Z	1
8	TOOL	CAT-EX-SCC-01	1

DESIGNED & DIMENSIONED IN MILLIMETERS [INCHES]

BARA-XXXXX-XX-XX-XXXX

**Pb** THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

END 2 CONNECTOR  
 -01BJ: SMA-J-C-X-ST-BS5 (SEE SHEET 3)  
 -01SP: SMA-P-C-X-ST-CS5 (SEE SHEET 3)  
 -SCC4: PRB4-P-C-X-ST-CS5 (SEE SHEET 3)  
 -00SJ: SMP-J-C-XX-ST-CS5 (SEE SHEET 3)  
 -00RJ: SMP-J-C-XX-RA-CS5 (SEE SHEET 3)  
 \*\*\*-92SJ: 292XX-J-C-XX-ST-CS5 (SEE SHEET 4)  
 \*\*\*-92SP: 292XX-P-C-XX-ST-CS5 (SEE SHEET 4)

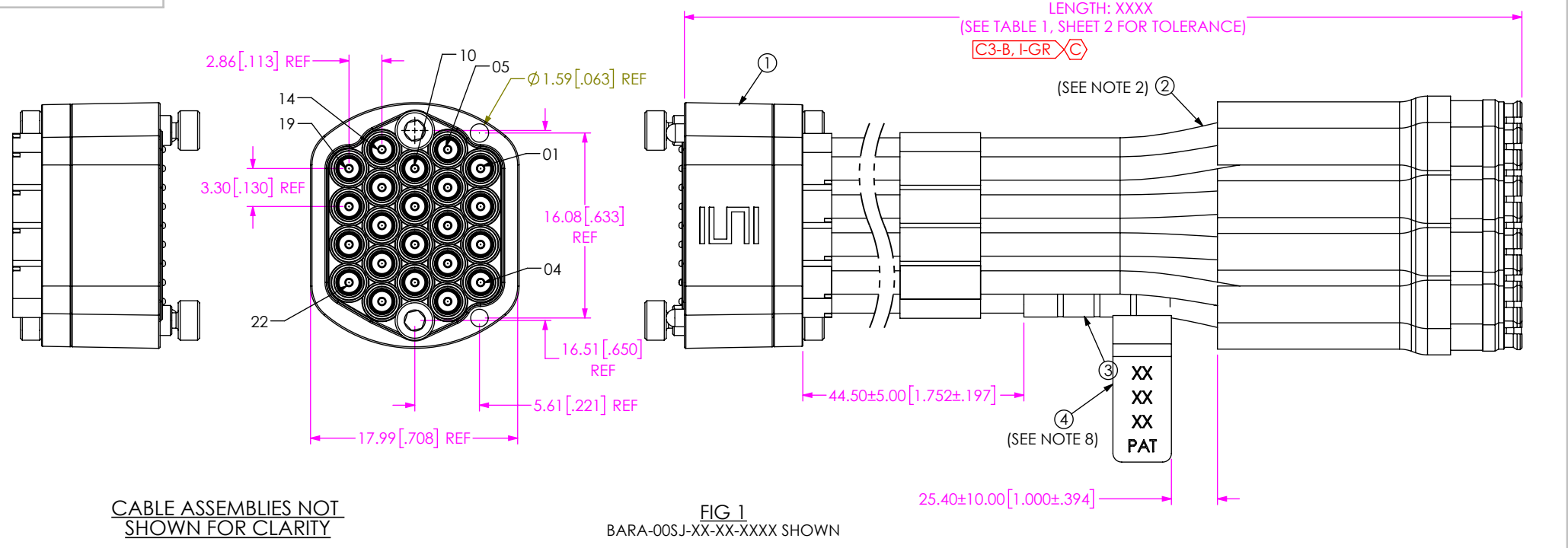
OVERALL CABLE LENGTH (MILLIMETERS)  
 0100-9999 [3.9 - 393.7]  
 (SEE NOTE 9 & 10)

PHASE MATCHED PAIRS  
 -11  
 (SEE SHEET 2, TABLE 3)

PHASE MATCHING SPEC (RANGE)  
 -02: 2.0 PICO-SECOND  
 -05: 5.0 PICO-SECONDS  
 -10: 10.0 PICO-SECONDS

END 2 PLATING OPTION  
 1: GOLD ALL COMPONENTS  
 6. ALTERNATE H GOLD / H GOLD / NICKEL  
 7. ALTERNATE GOLD MEDIUM/ GOLD FLASH  
 8. ALTERNATE HEAVY GOLD/MEDIUM GOLD  
 9. ALTERNATE HEAVY GOLD/MEDIUM GOLD  
 P: HEAVY GOLD / PASSIVATED STAINLESS STEEL  
 (SEE SHEET 2 AND 3 FOR PLATING SPECIFICS)

\*\*\*=NOT RELEASED



CABLE ASSEMBLIES NOT SHOWN FOR CLARITY

FIG 1  
 BARA-00SJ-XX-XX-XXXX SHOWN

- NOTES:**
- ③ REPRESENTS A CRITICAL DIMENSION
  - USE DRAWING No. BE25S-XXXXX-XX-X-02-XXXX FOR CABLE ASSEMBLY INSTRUCTIONS
  - PARTS TO BE PROCESSED PER SAMTEC WORKMANSHIP GUIDELINES.
  - ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED.
  - ALL ASSEMBLIES TO BE 100% HI-POT TESTED AT 300V.
  - NOTE DELETED.
  - FOR SUB-ASSEMBLY AND FINISHED GOOD PACKAGING REQUIREMENTS, REFERENCE SAMTEC PACKAGING STANDARD, LOCK WASHERS AND NUTS TO BE SHIPPED UNASSEMBLED.
  - PRINT CABLE POSITION AND "PAT" (3 LINES FOR POSITION) AND APPLY TO CABLES (TAG STYLE) AS SHOWN.
  - CABLE STOCKED IN INCHES, 1 INCH = 25.4 MILLIMETERS.
  - CABLE LENGTHS LONGER THAN 1000 MILLIMETERS ARE NOT SUPPORTED BY S.I. TEST DATA.

C1-D-ET C  
 C2-D-ET C

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES ARE: DECIMALS                      ANGLES X.X: ±0.3 [0.1]                      5° X.XX: ±0.13 [0.005] X.XXX: ±0.051 [0.0020]	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 53322

**TABLE 5**

BARA-XXXX-XX-11-XXXX ■	BE25S-XXXX-XX.X-02-XXXX ■
BARA-XXXX-02-11-XXXX	BE25S-XXXX-02.0-02-XXXX
BARA-XXXX-05-11-XXXX	BE25S-XXXX-05.0-02-XXXX
BARA-XXXX-10-11-XXXX	BE25S-XXXX-10.0-02-XXXX

■ BE25S' OVERALL CABLE LENGTH OPTION IS SAME AS BARA'S

**TABLE 4**

BARA-XXXX-XX-11-XXXX ■	BE25S-XXXX-XX.X-02-XXXX ■
BARA-01BJ1-XX-11-XXXX	BE25S-01BJ1-XX.X-02-XXXX
BARA-01SP1-XX-11-XXXX	BE25S-01SP1-XX.X-02-XXXX
BARA-SCC41-XX-11-XXXX	BE25S-SCC41-XX.X-02-XXXX
BARA-00SJ7-XX-11-XXXX	BE25S-00SJ7-XX.X-02-XXXX
BARA-00SJ8-XX-11-XXXX	BE25S-00SJ8-XX.X-02-XXXX
BARA-00RJ7-XX-11-XXXX	BE25S-00RJ7-XX.X-02-XXXX
BARA-00RJ8-XX-11-XXXX	BE25S-00RJ8-XX.X-02-XXXX
***BARA-92SJ6-XX-11-XXXX	***BE25S-92SJ6-XX.X-02-XXXX
***BARA-92SJ9-XX-11-XXXX	***BE25S-92SJ9-XX.X-02-XXXX
***BARA-92SJP-XX-11-XXXX	***BE25S-92SJP-XX.X-02-XXXX
***BARA-92SP6-XX-11-XXXX	***BE25S-92SP6-XX.X-02-XXXX
***BARA-92SP9-XX-11-XXXX	***BE25S-92SP9-XX.X-02-XXXX
***BARA-92SPP-XX-11-XXXX	***BE25S-92SPP-XX.X-02-XXXX

\*\*\* = NOT RELEASED

■ BE25S' OVERALL CABLE LENGTH OPTION IS SAME AS BARA'S

**TABLE 1: FINAL ASSEMBLY LENGTH TOLERANCE**

LENGTH	TOLERANCE
0100-0200 [3.92-7.87]	+3.0 [.12]/-0.0 [.00]
0200-0500 [7.87-19.69]	+5.0 [.20]/-0.0 [.00]
0500-1100 [19.69-43.30]	+10.0 [.40]/-0.0 [.00]

**TABLE 3 - PHASE MATCHED PAIRS**

POSITION	PAIR NO.
1	1
2	1
3	2
4	2
5	3
6	3
7	4
8	4
9	5
10	5
11	6
12	6
13	7
14	7
15	8
16	8
17	9
18	9
19	10
20	10
21	11
22	11

CAUTION: EACH PAIR OF CABLES MUST BE PHASE MATCHED PER CALLOUT. IF RE-WORKED, THE ENTIRE PAIR MUST BE REPLACED.

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SHEET SCALE: 2:1



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

DESCRIPTION: BULLSEYE 22 POSITION ASSEMBLY

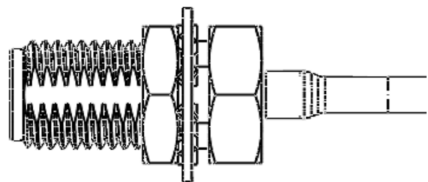
DWG. NO. BARA-XXXX-XX-XX-XXXX

BY: ALVIN W 02/11/2014 SHEET 2 OF 6

**-01BJ**

(STRAIGHT BULKHEAD JACK)

(USE DRAWING No. SMA-J-C-X-ST-BS5 FOR ASSEMBLY INSTRUCTIONS)  
(SEE NOTE 7)



**PLATING**

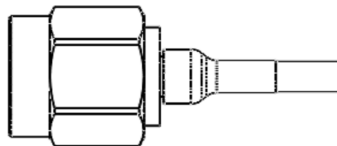
1: 30µ" MIN. GOLD CENTER CONTACT  
3µ" MIN. GOLD OUTER CONTACT  
3µ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: SMA-J-C-H-ST-BS5)

**NOTE:** ALL CRITICAL DIMENSIONS ON SMA-J-C-X-ST-BS5 THAT APPLY MUST BE VERIFIED.

**-01SP**

(STRAIGHT PLUG)

(USE DRAWING No. SMA-P-C-X-ST-CS5 FOR ASSEMBLY INSTRUCTIONS)



**PLATING**

1: 30µ" MIN. GOLD CENTER CONTACT  
3µ" MIN. GOLD OUTER CONTACT  
3µ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: SMA-P-C-H-ST-CS5)

**NOTE:** ALL CRITICAL DIMENSIONS ON SMA-P-C-X-ST-CS5 THAT APPLY MUST BE VERIFIED.

**-SCC4**

(ROUND TIP/STD. FERRULE)

(USE DRAWING No. PRB4-P-C-X-ST-CS5 FOR ASSEMBLY INSTRUCTIONS)



**PLATING**

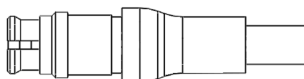
1: 30µ" MIN. GOLD CENTER CONTACT  
3µ" MIN. GOLD OUTER CONTACT  
3µ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: PRB4-P-C-H-ST-CS5)

**NOTE:** ALL CRITICAL DIMENSIONS ON PRB4-P-C-X-ST-CS5 THAT APPLY MUST BE VERIFIED.

**-00SJ**

(STRAIGHT JACK)

(USE DRAWING No. SMP-J-C-XX-ST-CS5 FOR ASSEMBLY INSTRUCTIONS)



**PLATING OPTIONS**

7: 10µ" MIN. GOLD CENTER CONTACT  
3µ" MIN. GOLD OUTER CONTACT  
100µ" MIN. NICKEL REMAINING METAL PARTS  
(END CONNECTOR P/N: SMP-J-C-GF-ST-CS5)

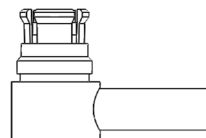
8: 30µ" MIN. GOLD CENTER CONTACT  
10µ" MIN. GOLD OUTER CONTACT  
3µ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: SMP-J-C-HG-ST-CS5)

**NOTE:** ALL CRITICAL DIMENSIONS ON SMP-J-C-XX-ST-CS5 THAT APPLY MUST BE VERIFIED.

**-00RJ**

(RIGHT ANGLE JACK)

(USE DRAWING No. SMP-J-C-XX-RA-CS5 FOR ASSEMBLY INSTRUCTIONS)



**PLATING OPTIONS**

7: 10µ" MIN. GOLD CENTER CONTACT  
3µ" MIN. GOLD OUTER CONTACT  
100µ" MIN. NICKEL REMAINING METAL PARTS  
(END CONNECTOR P/N: SMP-J-C-GF-RA-CS5)

8: 30µ" MIN. GOLD CENTER CONTACT  
10µ" MIN. GOLD OUTER CONTACT  
3µ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: SMP-J-C-HG-RA-CS5)

**NOTE:** ALL CRITICAL DIMENSIONS ON SMP-J-C-XX-RA-CS5 THAT APPLY MUST BE VERIFIED.

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SHEET SCALE: 1:1

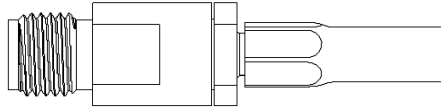
DESCRIPTION:  
**BULLSEYE 22 POSITION ASSEMBLY**

DWG. NO.  
**BARA-XXXXX-XX-XX-XXXX**

BY: ALVIN W 02/11/2014 SHEET 3 OF 6

**\*\*\*-92SJ**  
(STRAIGHT JACK)

(USE DRAWING No. 292XX-J-C-XX-ST-CS5  
FOR ASSEMBLY INSTRUCTIONS)



PLATING OPTIONS

6: 30μ" MIN. GOLD CENTER CONTACT  
30μ" MIN. GOLD OUTER CONTACT  
3μ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: 292PB-J-C-HH-ST-CS5)

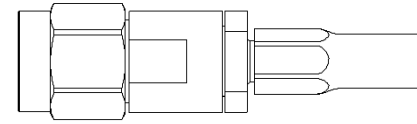
9: 30μ" MIN. GOLD CENTER CONTACT  
10μ" MIN. GOLD OUTER CONTACT  
3μ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: 292PB-J-C-HG-ST-CS5)

P: 30μ" MIN. GOLD CENTER CONTACT  
PASSIVATED STAINLESS STEEL OUTER CONTACT  
3μ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: 292PS-J-C-HP-ST-CS5)

**NOTE:** ALL CRITICAL DIMENSIONS ON 292XX-J-C-XX-ST-CS5  
THAT APPLY MUST BE VERIFIED.

**\*\*\*-92SP**  
(STRAIGHT PLUG)

(USE DRAWING No. 292XX-P-C-XX-ST-CS5  
FOR ASSEMBLY INSTRUCTIONS)




PLATING OPTIONS

6: 30μ" MIN. GOLD CENTER CONTACT  
30μ" MIN. GOLD OUTER CONTACT  
3μ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: 292PB-P-C-HH-ST-CS5)

9: 30μ" MIN. GOLD CENTER CONTACT  
10μ" MIN. GOLD OUTER CONTACT  
3μ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: 292PB-P-C-HG-ST-CS5)

P: 30μ" MIN. GOLD CENTER CONTACT  
PASSIVATED STAINLESS STEEL OUTER CONTACT  
3μ" MIN. GOLD REMAINING METAL PARTS  
(END CONNECTOR P/N: 292PS-P-C-HP-ST-CS5)

**NOTE:** ALL CRITICAL DIMENSIONS ON 292XX-P-C-XX-ST-CS5  
THAT APPLY MUST BE VERIFIED.

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<p>DO NOT SCALE DRAWING</p> <p>SHEET SCALE: 1:1</p>	<p>DESCRIPTION: <b>BULLSEYE 22 POSITION ASSEMBLY</b></p> <p>DWG. NO. <b>BARA-XXXXX-XX-XX-XXXX</b></p> <p>BY: ALVIN W      02/11/2014      SHEET 4 OF 6</p>

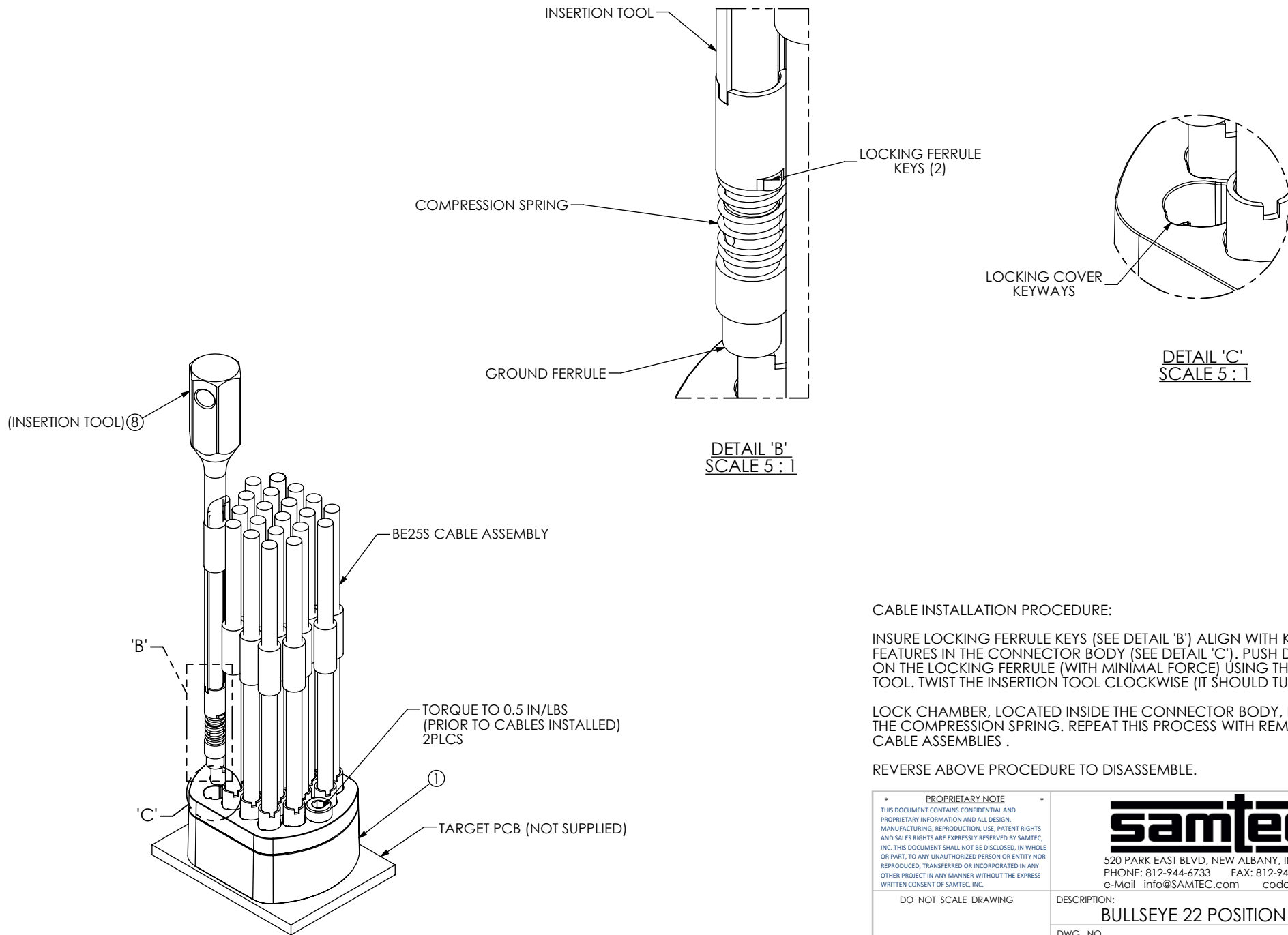


FIG 3  
APPLICATION VIEW

CABLE INSTALLATION PROCEDURE:

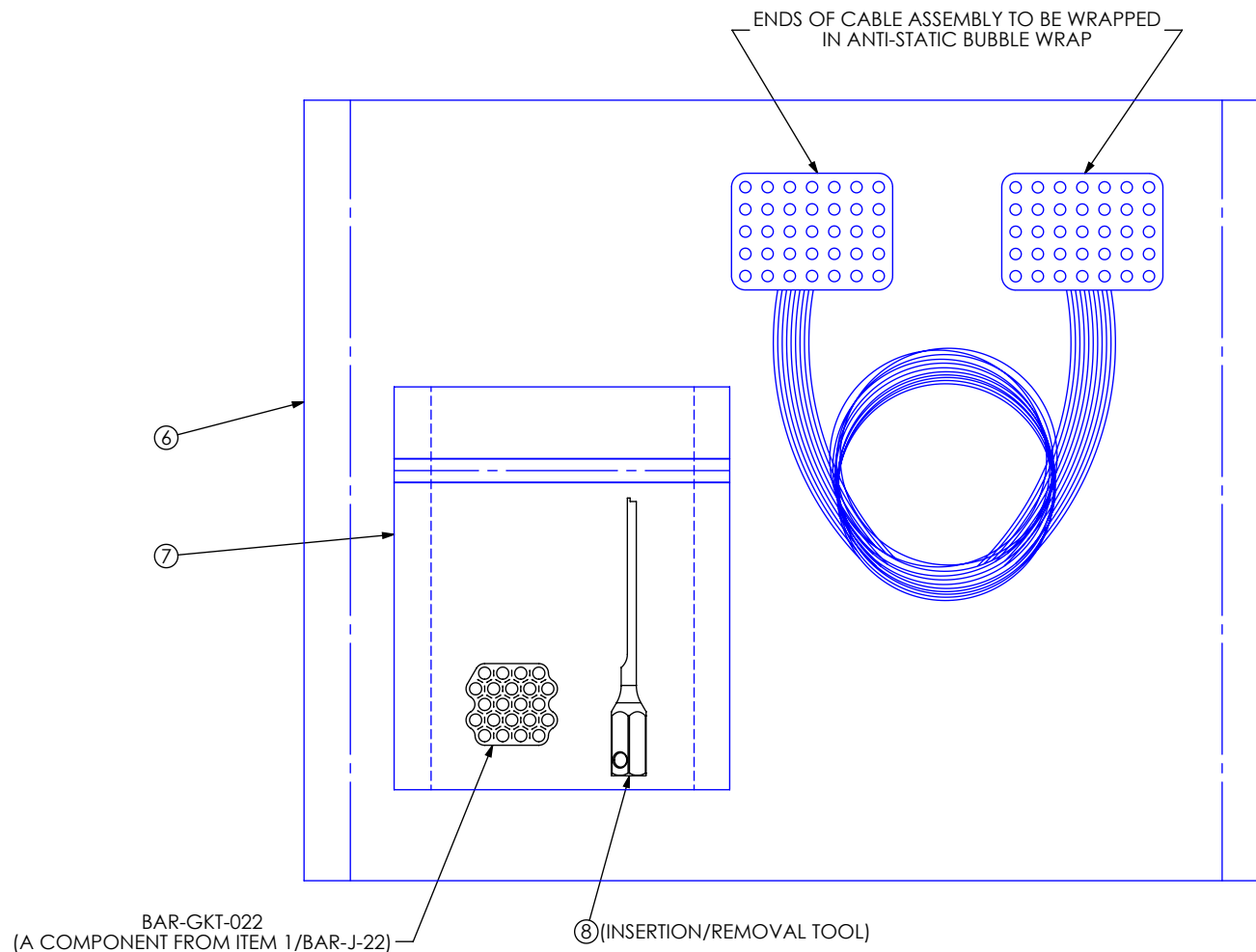
INSURE LOCKING FERRULE KEYS (SEE DETAIL 'B') ALIGN WITH KEYWAY FEATURES IN THE CONNECTOR BODY (SEE DETAIL 'C'). PUSH DOWN ON THE LOCKING FERRULE (WITH MINIMAL FORCE) USING THE INSERTION TOOL. TWIST THE INSERTION TOOL CLOCKWISE (IT SHOULD TURN FREELY)

LOCK CHAMBER, LOCATED INSIDE THE CONNECTOR BODY, BY WAY OF THE COMPRESSION SPRING. REPEAT THIS PROCESS WITH REMAINING CABLE ASSEMBLIES .

REVERSE ABOVE PROCEDURE TO DISASSEMBLE.

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	<p>DESCRIPTION: <b>BULLSEYE 22 POSITION ASSEMBLY</b></p>	
	<p>DWG. NO. <b>BARA-XXXX-XX-XX-XXXX</b></p>	
<p>BY: ALVIN W      02/11/2014</p>		<p>SHEET 5 OF 6</p>

**PACKAGING VIEW**



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 EMAIL: INFO@SAMTEC.COM

DO NOT SCALE DRAWING

DESCRIPTION:  
**BULLSEYE 22 POSITION ASSEMBLY**

DWG. NO.  
**BARA-XXXXX-XX-XX-XXXX**

SHEET SCALE: 2:1

BY: ALVIN W 02/11/2014 SHEET 6 OF 6