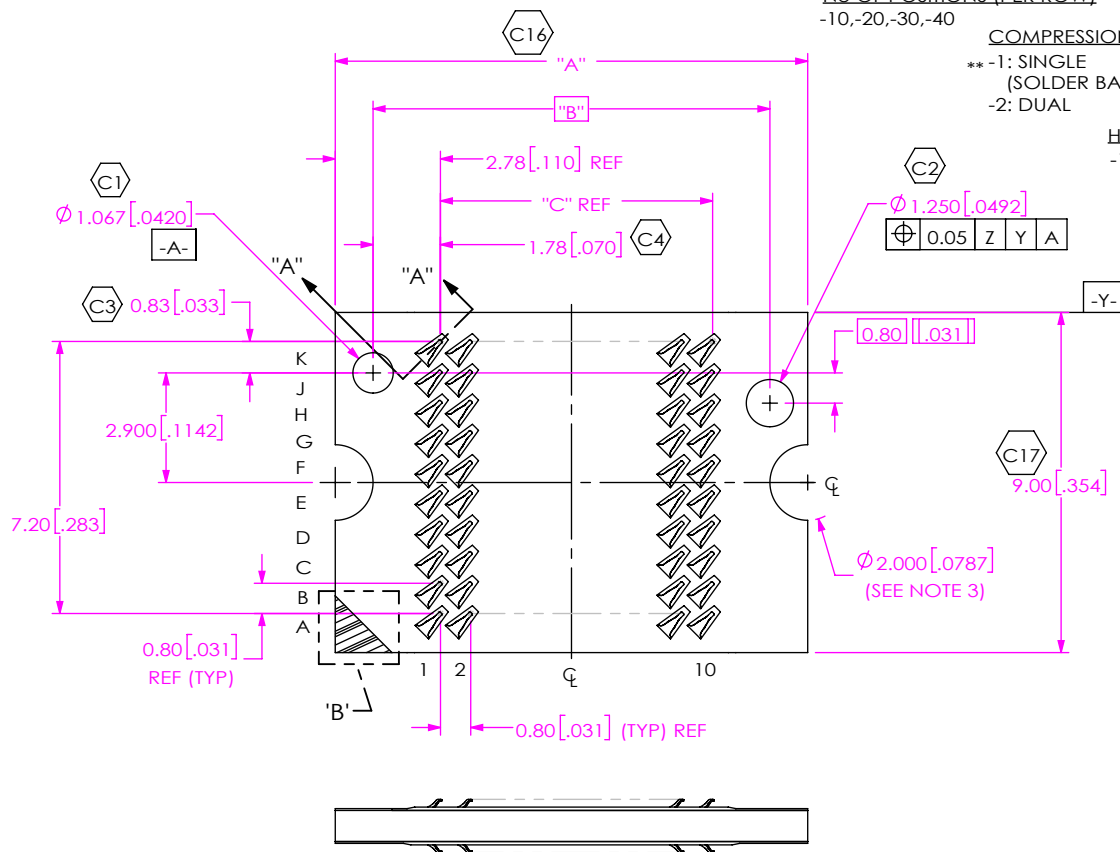


DO NOT
SCALE FROM
THIS PRINT

ZA8-XX-X-X.XX-X-XX-X



No OF POSITIONS (PER ROW)
-10,-20,-30,-40

COMPRESSION

** -1: SINGLE
(SOLDER BALL SIDE 2)
-2: DUAL

HEIGHT

-1.00

SOLDER COMPOSITION

LEAVE BLANK FOR -2 DUAL COMPRESSION
-2: LEAD-FREE (96.5% Sn/3% Ag/.5% Cu)

ROW SPECIFICATION

-10: 10 ROWS

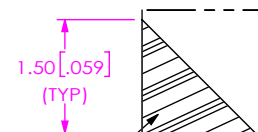
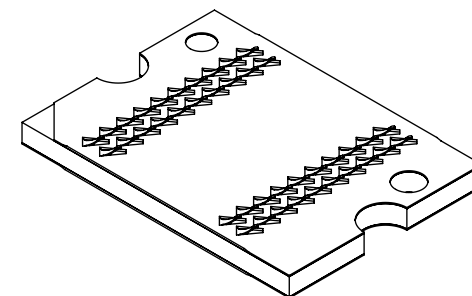
PLATING SPECIFICATION

-Z: 6µ" MIN Au [C15] OVER 40-100µ" Ni [C14]

*-S: 30µ" MIN Au [C15] OVER 40-100µ" Ni [C14]

* NOT RELEASED

**ONLY AVAILABLE IN -10 & -20 POSITIONS



POSITION 1 INDICATOR
THROUGH COVERFILM ONLY

DETAIL 'B'
SCALE 10 : 1

FIG 1
ZA8-10-2-1.00-X-10 SHOWN
(DUAL COMPRESSION)
(SOME CENTER FEATURES REMOVED FOR CLARITY)

| TABLE 1 | | | |
|-----------|---------------|-----------------|---------------|
| No OF POS | "A" | "B" | "C" |
| -10 | 12.50 [0.492] | 10.500 [0.4134] | 7.20 [0.283] |
| -20 | 20.50 [0.807] | 18.500 [0.7283] | 15.20 [0.598] |
| -30 | 31.70 [1.248] | 29.700 [1.1693] | 26.40 [1.039] |
| -40 | 39.70 [1.563] | 37.700 [1.4843] | 34.40 [1.354] |

NOTES:

- ① REPRESENTS A CRITICAL DIMENSION.
- CONTACT POINTS ARE MEASURED IN UNCOMPRESSED STATE.
- RECOMMENDED SCREW SIZE: M1.6.
- ELECTRICAL TEST: 100% ISOLATION & CONTINUITY TESTS REQUIRED
100% HI-POT REQUIRED AT 300V
MINIMUM PIN TO PIN ISOLATION TO BE 200 MEGA OHMS.
- PARTS TO BE PACKAGED IN TRAYS.
- DIMENSION AFTER FINAL REFLOW IS 1.000 [0.0394].
- MAXIMUM BURR AFTER DICING: 0.125 [0.005].
- PARTS TO BE PROCESSED PER SAMTEC WORKMANSHIP GUIDELINE: NA-ZR-WI-3015-M.
- PAD SIZE IS DEFINED BY SOLDERMASK OPENING; SOLDERMASK THICKNESS IS .0254MM +/- .0127MM.
- TOTAL STACK HEIGHT OF MATERIAL LAYERS IS REPRESENTED IN CONTACT ARRAY AREA. AREAS OUTSIDE OF THE ARRAY HAVE THE FOIL LAYER REMOVED RESULTING IN THINNER PROFILE DIMENSION OUTSIDE OF ARRAY.
- INSPECTION IS OF THE CENTER AND HIGHEST POINT (POINT OF CONTACT) INSPECT OPPOSING CORNER LOCATIONS ONLY BOTH SIDES.

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES ARE:

DECIMALS ANGLES
X.X: ±0.3 [01] 2°
X.XX: ±0.13 [005]
X.XXX: ±0.051 [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.

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

CONTACT: BeCu
CORE: FR4
COVERLAY: POLYIMIDE

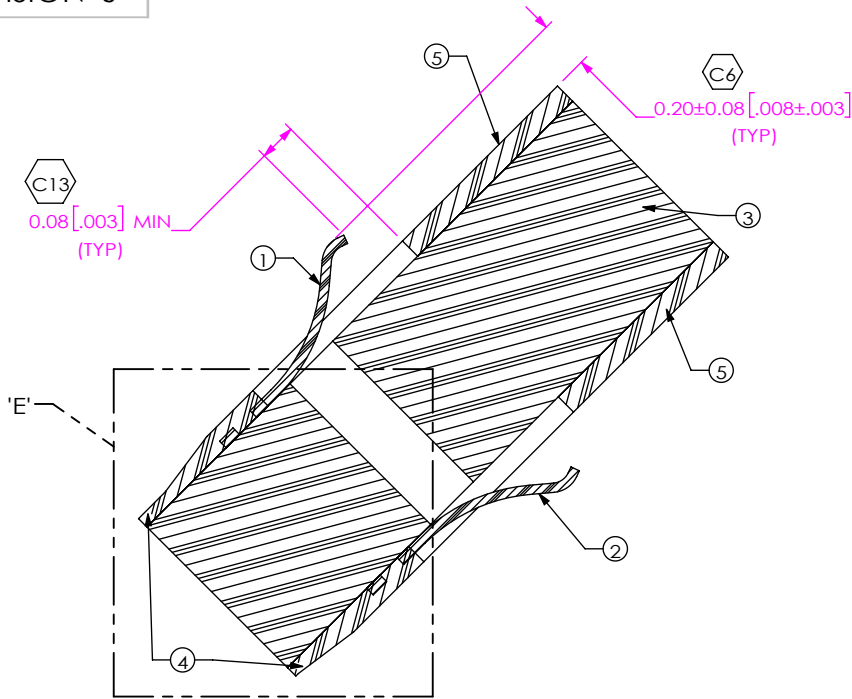


520 PARK EAST BLVD. NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code 55322

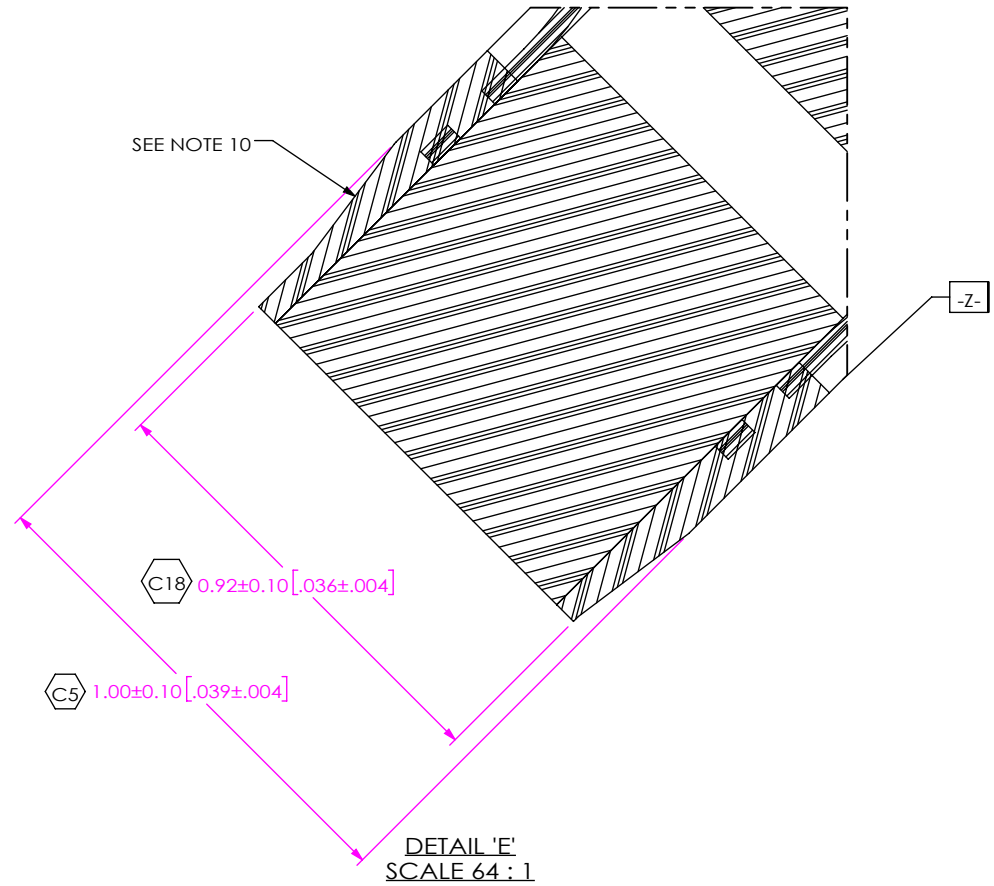
DESCRIPTION:
Z-RAY 0.8 mm PITCH DUAL COMP

DWG. NO.
ZA8-XX-X-X.XX-X-XX-X

BY: D.SCHMELZ 10/29/2013 SHEET 1 OF 6



SECTION "A"-"A"
SCALE 32 : 1



DETAIL 'E'
SCALE 64 : 1

ZA8-XX-2-X.XX-X-XX BOM

| ITEM NO. | PART NUMBER | DESCRIPTION | 10X10 QTY | 20X10 QTY | 30X10 QTY | 40X10 QTY | MATERIAL |
|----------|-------------------------|-------------|-----------|-----------|-----------|-----------|-------------------------|
| 1 | FOIL-0001-NS-01 | CONTACT | .01042 | .01563 | .03125 | .03125 | BeCu |
| 2 | FOIL-0001-FS-01 | CONTACT | .01042 | .01563 | .03125 | .03125 | BeCu |
| 3 | PCB-(SEE TABLE 2) | CORE | .01042 | .01563 | .03125 | .03125 | FR4 |
| 4 | FR1515-6X9-0001 | BOND PLY | .02084 | .03126 | .06250 | .06250 | ADHESIVE/POLYIMIDE FILM |
| 5 | ZCF-BL03-FR01-1209-BK | COVERFILM | .01042 | .01563 | .03125 | .03125 | ADHESIVE/POLYIMIDE FILM |
| 6 | TY-ZA800X (SEE TABLE 2) | TRAY | .02083 | .02381 | .02778 | .03333 | RPET (CLEAR) |

TABLE 2

| No OF POS | COMPRESSION | PCB-106100-ZA8-XX-XX-01 | CAM DATA | TRAY |
|-----------|-------------|-------------------------|----------|-----------|
| -10 | -2 | PCB-106100-ZA8-10-10-01 | ZR-00002 | TY-ZA8001 |
| -20 | -2 | PCB-106100-ZA8-20-10-01 | ZR-00003 | TY-ZA8003 |
| -30 | -2 | PCB-106100-ZA8-30-10-01 | ZR-00004 | TY-ZA8002 |
| -40 | -2 | PCB-106100-ZA8-40-10-01 | ZR-00005 | TY-ZA8004 |

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: 4:1



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

DESCRIPTION:
Z-RAY 0.8 mm PITCH DUAL COMP

DWG. NO.
ZA8-XX-X-X.XX-X-XX-X

BY: D.SCHMELZ 10/29/2013 SHEET 2 OF 6

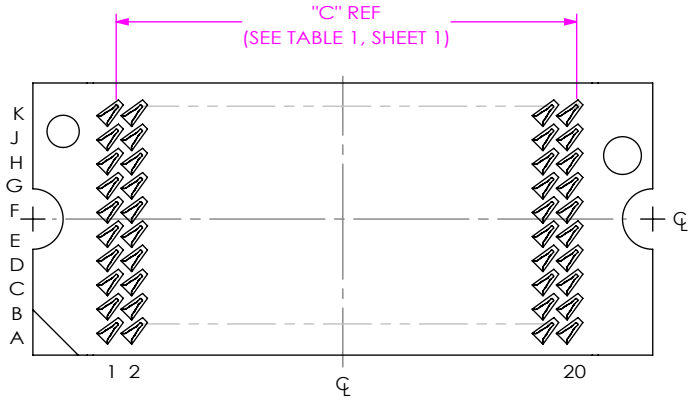


FIG 2
 ZA8-20-2-1.00-X-10 SHOWN
 (DUAL COMPRESSION)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (SOME CENTER FEATURES REMOVED FOR CLARITY)

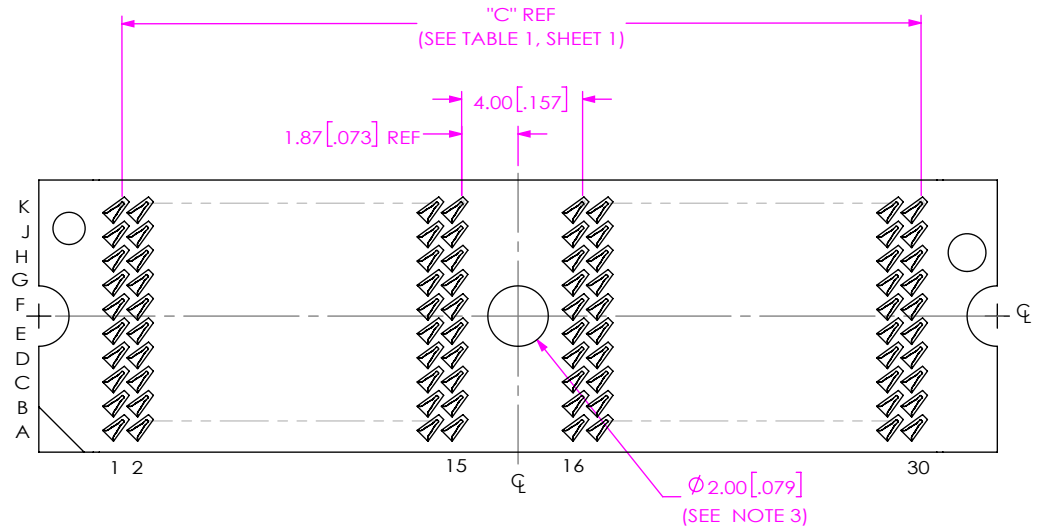


FIG 3
 ZA8-30-2-1.00-X-10 SHOWN
 (DUAL COMPRESSION)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (SOME CENTER FEATURES REMOVED FOR CLARITY)

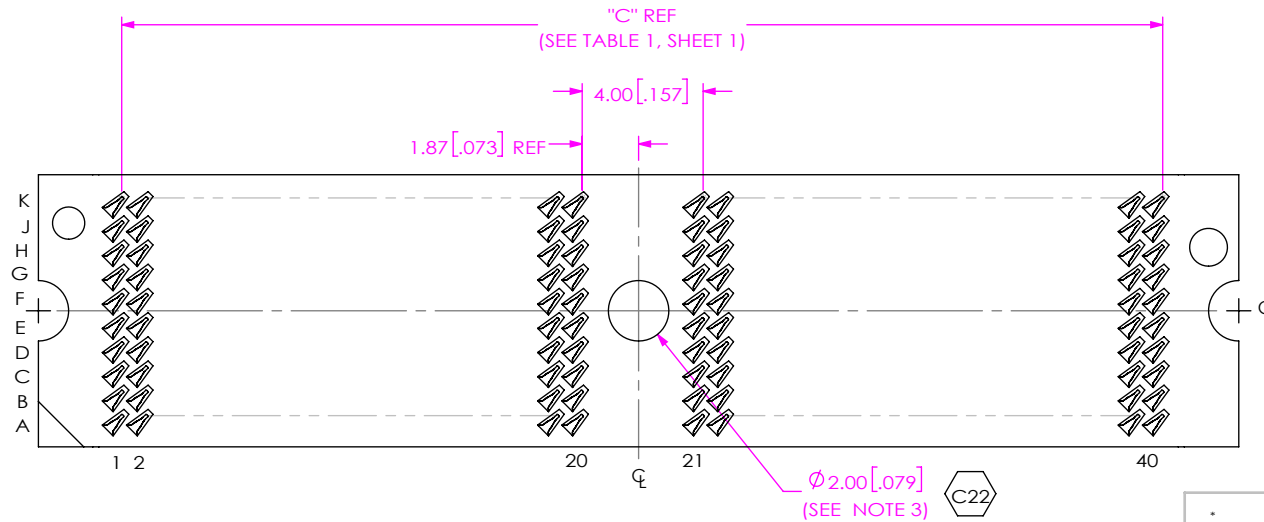


FIG 4
 ZA8-40-2-1.00-X-10 SHOWN
 (DUAL COMPRESSION)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (SOME CENTER FEATURES REMOVED FOR CLARITY)

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: 4:1



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

DESCRIPTION:
 Z-RAY 0.8 mm PITCH DUAL COMP

DWG. NO.
ZA8-XX-X-X.XX-X-XX-X

BY: D.SCHMELZ 10/29/2013 SHEET 3 OF 6

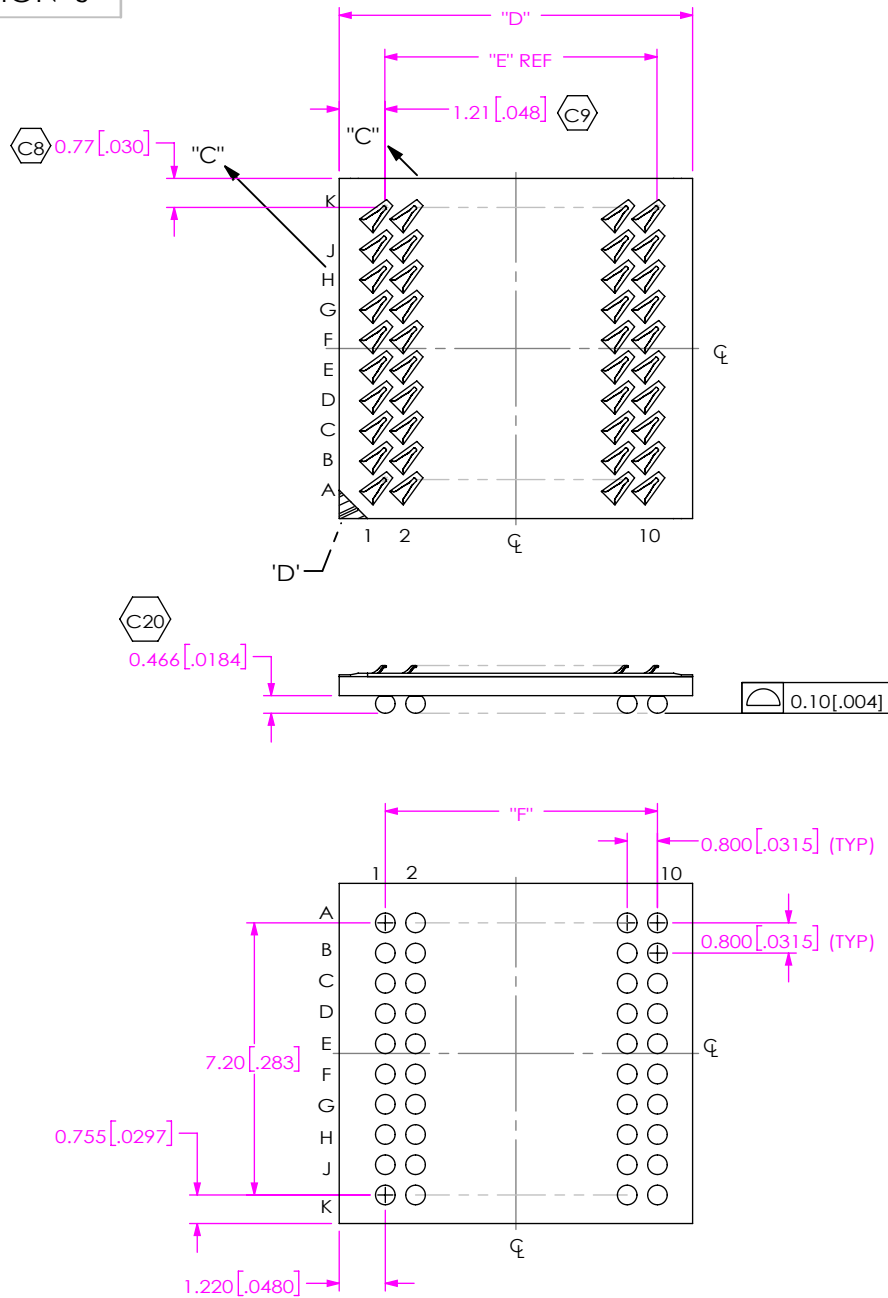
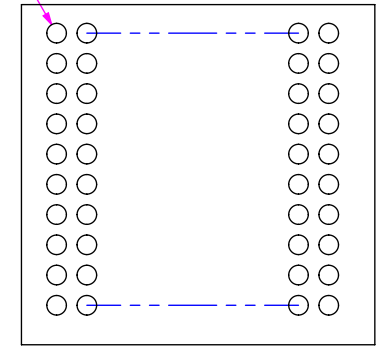
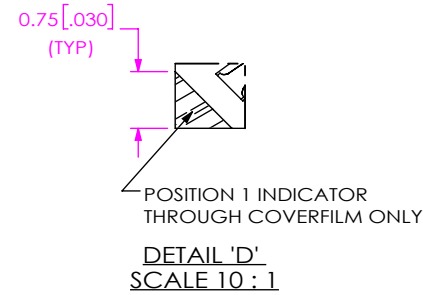
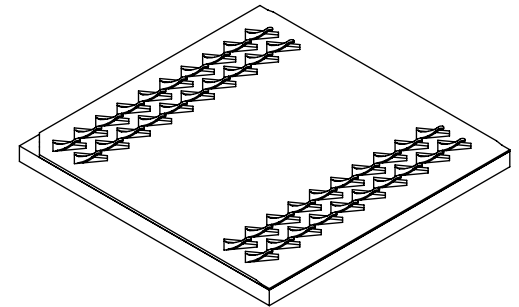
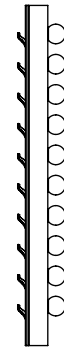


FIG 5
 ZA8-10-1-1.00-X-10-X SHOWN
 (SINGLE COMPRESSION)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (SOME CENTER FEATURES REMOVED FOR CLARITY)

$\varnothing 0.34 \pm 0.06$ [0.13 ± 0.02]
 (SOLDERMASK OPENING)
 (SEE NOTE 9)



IN PROCESS



| No OF POS | "D" | "E" | "F" |
|-----------|--------------|----------------|----------------|
| -10 | 9.35 [.368] | 7.200 [.2835] | 7.200 [.2835] |
| -20 | 17.35 [.683] | 15.200 [.5984] | 15.200 [.5984] |

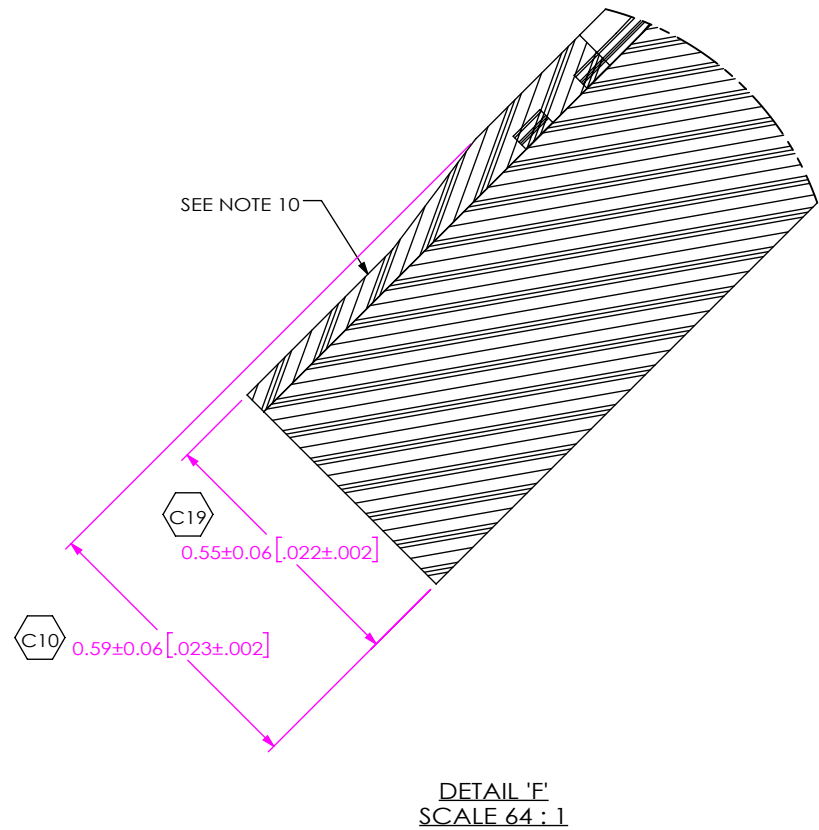
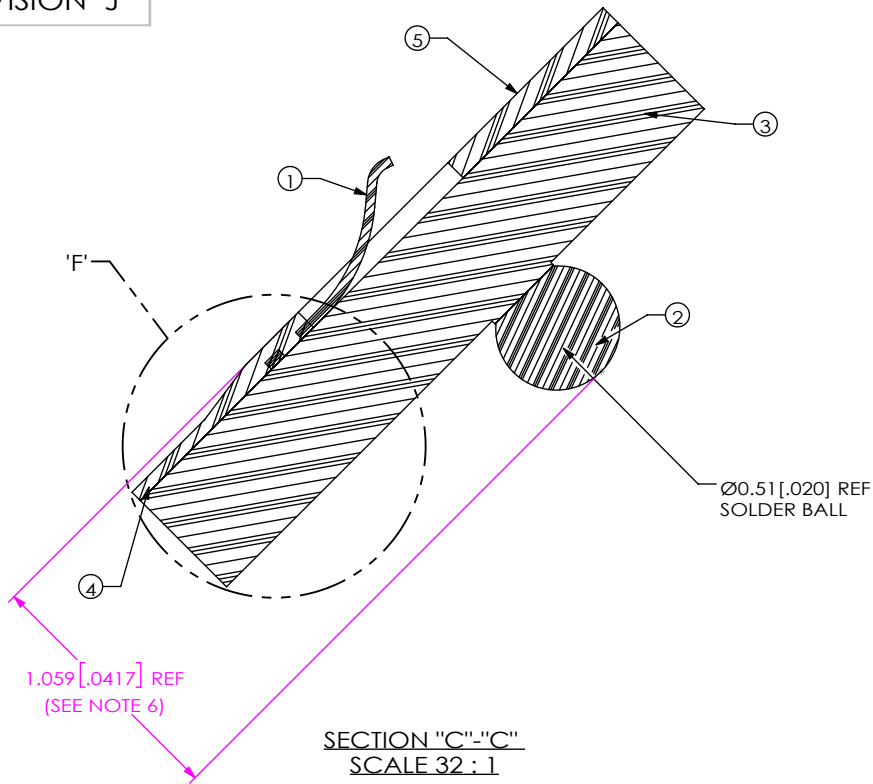
PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, 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
 SHEET SCALE: 5:1

DESCRIPTION:
 Z-RAY 0.8 mm PITCH DUAL COMP
 DWG. NO.
ZA8-XX-X-X.XX-X-XX-X
 BY: D.SCHMELZ 10/29/2013 SHEET 4 OF 6



| ZA8-XX-1-X.XX-X-XX-X BOM | | | | | | | |
|--------------------------|-------------------------|-------------|-----------|-----------|------------|------------|-------------------------|
| ITEM NO. | PART NUMBER | DESCRIPTION | 10X10 QTY | 20X10 QTY | *30X10 QTY | *40X10 QTY | MATERIAL |
| 1 | FOIL-0001-NS-01 | CONTACT | .00781 | .01563 | .03125 | .03125 | BeCu |
| 2 | SDB-020-9653 | SOLDER BALL | 100 | 200 | 300 | 400 | SEE CALLOUT |
| 3 | PCB-(SEE TABLE 3) | CORE | .00781 | .01563 | .03125 | .03125 | FR4 |
| 4 | LF1535-6X9-0001 | BOND PLY | .00781 | .01563 | .03125 | .03125 | ADHESIVE/POLYIMIDE FILM |
| 5 | ZCF-BL03-FR01-1209-BK | COVERFILM | .00391 | .00782 | .01563 | .01563 | ADHESIVE/POLYIMIDE FILM |
| 6 | PPP-77-09.00 | P & P PAD | 1 | 1 | 1 | 1 | LCP |
| 7 | TY-ZA800X (SEE TABLE 3) | TRAY | .02220 | .02860 | .03330 | .04000 | RPET (CLEAR) |

*=NOT RELEASED

| TABLE 3 | | | | |
|-----------|-------------|-------------------------|----------|-----------|
| No OF POS | COMPRESSION | PCB-XXXXXX-ZA8-XX-XX-01 | CAM DATA | TRAY |
| -10 | -1 | PCB-106391-ZA8-10-10-01 | ZR-00006 | TY-ZA8005 |
| -20 | -1 | PCB-106391-ZA8-20-10-01 | ZR-00007 | TY-ZA8006 |

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: 5:1



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

DESCRIPTION: Z-RAY 0.8 mm PITCH DUAL COMP

DWG. NO. ZA8-XX-X-X.XX-X-XX-X

BY: D.SCHMELZ 10/29/2013 SHEET 5 OF 6

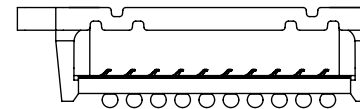
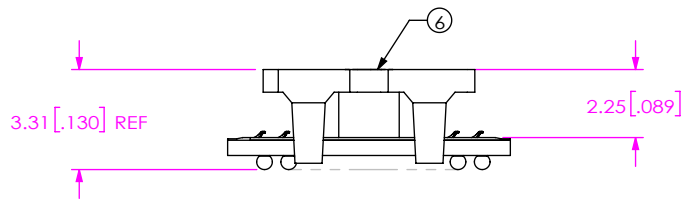
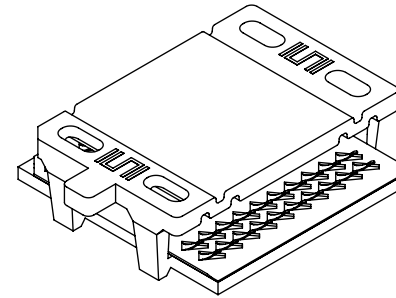
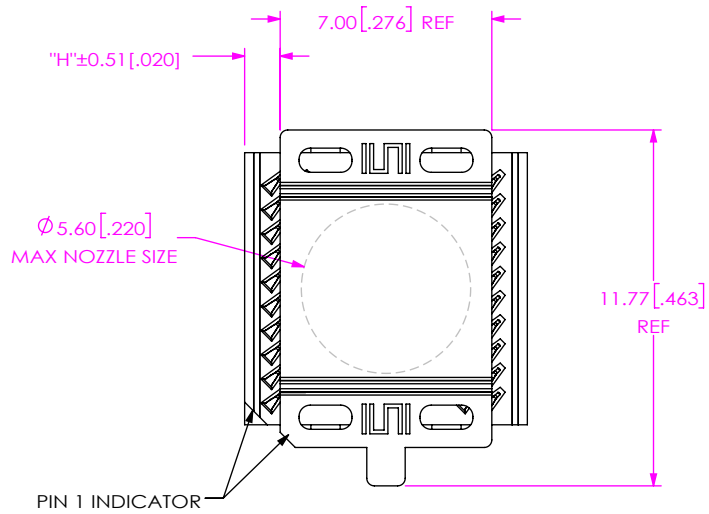


FIG Z
ZA8-10-1-1.00-X-10-X SHOWN
(SINGLE COMPRESSION WITH PPP)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)
(SOME CENTER FEATURES REMOVED FOR CLARITY)

| No OF POS | "H" |
|-----------|-------------|
| -10 | 1.17 [.046] |
| -20 | 5.17 [.204] |

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: 4:1

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:
Z-RAY 0.8 mm PITCH DUAL COMP

DWG. NO.
ZA8-XX-X-X.XX-X-XX-X

BY: D.SCHMELZ 10/29/2013 SHEET 6 OF 6