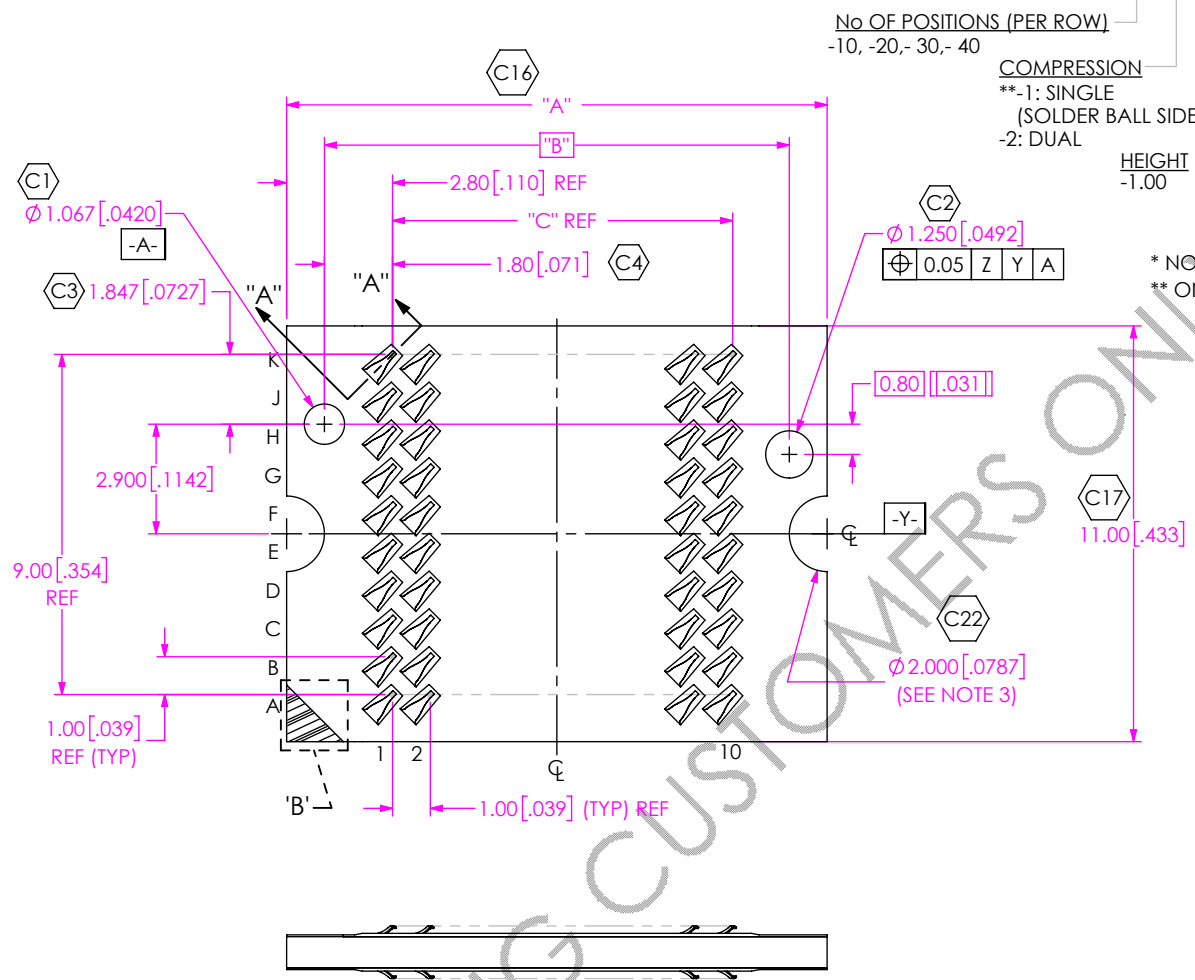


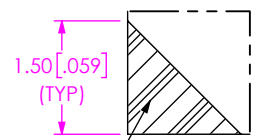
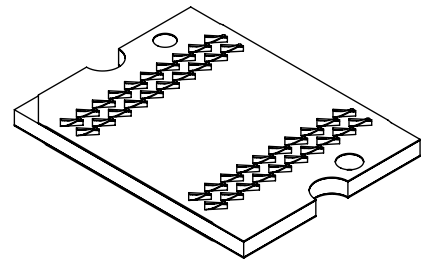
DO NOT  
SCALE FROM  
THIS PRINT



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

**ROW SPECIFICATION**  
-10: 10 ROWS

**PLATING SPECIFICATION**  
-Z: 6 $\mu$  MIN Au (C15) OVER 40-100 $\mu$  Ni (C20)  
\*-S: 30 $\mu$  MIN Au (C15) OVER 40-100 $\mu$  Ni (C20)



POSITION 1 INDICATOR THROUGH COVERFILM ONLY  
DETAIL 'B' SCALE 10:1

FIG 1  
ZA1-10-2-1.00-X-10 SHOWN  
(DUAL COMPRESSION)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

TABLE 1			
No OF POS	"A"	"B"	"C"
-10	14.30 [0.563]	12.300 [0.4843]	9.00 [0.354]
-20	24.30 [0.957]	22.300 [0.8780]	19.00 [0.748]
-30	38.30 [1.508]	36.300 [1.4291]	33.00 [1.299]
-40	48.30 [1.902]	46.300 [1.8228]	43.00 [1.693]

NOTES:

1.  $\text{C}$  REPRESENTS A CRITICAL DIMENSION.
2. CONTACT POINTS ARE MEASURED IN UNCOMPRESSED STATE.
3. RECOMMENDED SCREW SIZE: M1.6
4. ELECTRICAL TEST: TESTED TO STANDARD 100% ISOLATION & CONTINUITY TESTS REQUIRED 100% HI-POT REQUIRED AT 300V MINIMUM PIN TO PIN ISOLATION TO BE 200 MEGA OHMS
5. PARTS TO BE PACKAGED IN TRAYS.
6. DIMENSION AFTER FINAL REFLOW IS 1.000[0.0394].
7. MAXIMUM BURR AFTER DICING: 0.125[0.005].
8. PARTS TO BE PROCESSED PER SAMTEC WORKMANSHIP GUIDELINES: NA-ZR-WI-3015-M.
9. PAD SIZE IS DEFINED BY SOLDERMASK OPENING; SOLDERMASK THICKNESS IS 0.0254 $\pm$ 0.0127mm.
10. 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.

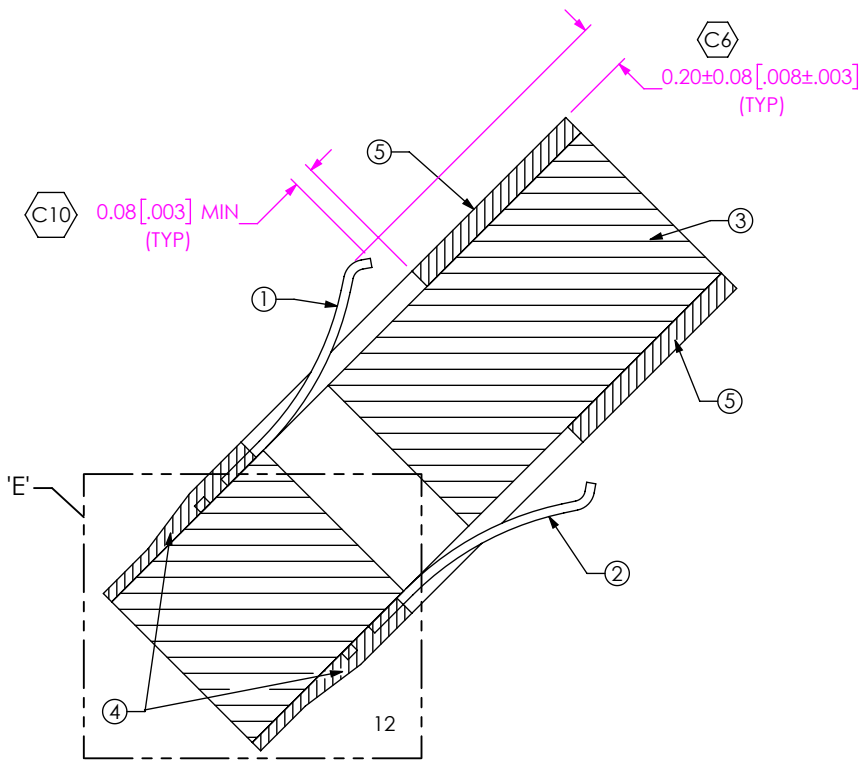
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS.  
TOLERANCES ARE:  
DECIMALS ANGLES  
X.X:  $\pm 0.3$  [0.1] 2°  
X.XX:  $\pm 0.13$  [0.05]  
X.XXX:  $\pm 0.051$  [0.020]

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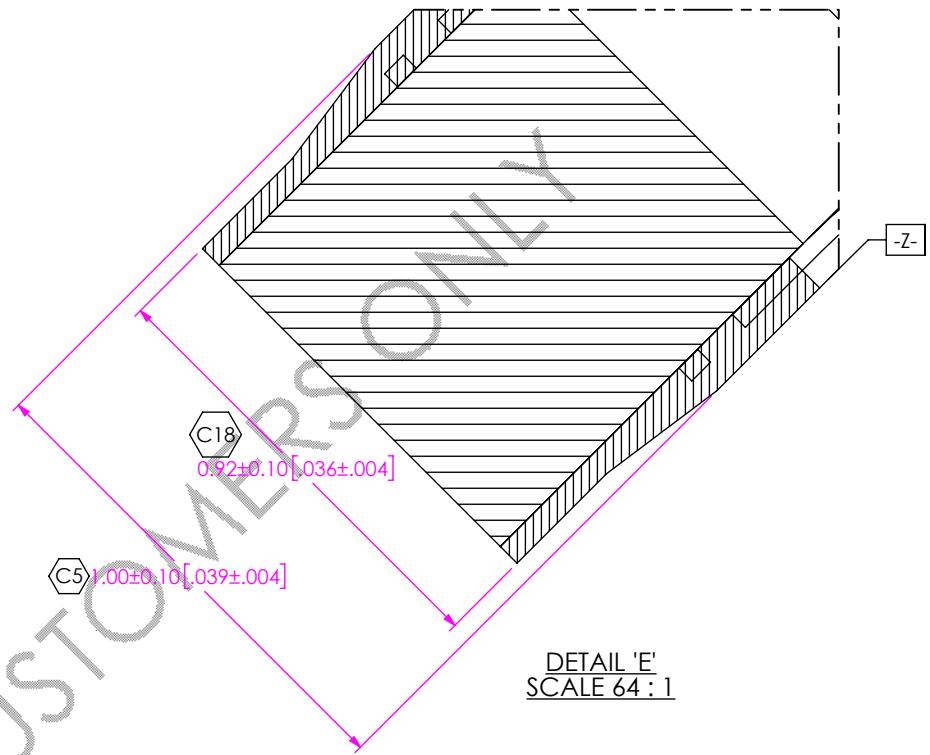
**samtec**  
520 PARK EAST BLVD., NEW ALBANY, IN 47150  
PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail: info@SAMTEC.com code 53322

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2:1  
CONTACT: BeCu  
CORE: FR4  
COVERLAY: POLYIMIDE

DESCRIPTION: 1.0mm PITCH ZRAY ASSEMBLY  
DWG. NO. ZA1-XX-X-X.XX-X-XX-X



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



DETAIL 'E'  
SCALE 64 : 1

ZA1-XX-2-X.XX-X-XX-X BOM

ITEM NO.	PART NUMBER	DESCRIPTION	10X10 QTY	20X10 QTY	30X10 QTY	40X10 QTY	MATERIAL
1	FOIL-0002-NS-01	CONTACT	.01111	.01667	.03333	.03333	BeCu
2	FOIL-0002-FS-01	CONTACT	.01111	.01667	.03333	.03333	BeCu
3	PCB-(SEE TABLE 2)	CORE	.01111	.01667	.03333	.03333	FR4
4	FR1515-6X9-0002	BOND FLY	.02222	.03333	.06667	.06667	ADHESIVE/POLYIMIDE FILM
5	ZCF-BL03-FR01-1209-BK	COVERFILM	.01111	.01667	.03333	.03333	ADHESIVE/POLYIMIDE FILM
6	TRAY-(SEE TABLE 2)	TRAY	.02500	.02857	.04000	.05000	CLEAR ESD COATED RPET

TABLE 2

No OF POS	COMPRESSION	PCB-106543-ZA1-XX-10-01	CAM DATA	TRAY
-10	-2	PCB-106543-ZA1-10-10-01	ZR-00011	TY-ZA1001
-20	-2	PCB-106543-ZA1-20-10-01	ZR-00012	TY-ZA1002
-30	-2	PCB-106543-ZA1-30-10-01	ZR-00013	TY-ZA1003
-40	-2	PCB-106543-ZA1-40-10-01	ZR-00014	TY-ZA1004

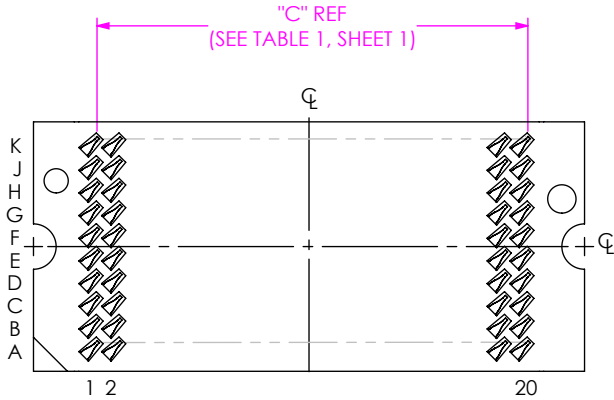
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DO NOT SCALE DRAWING  
 SHEET SCALE: 3:1

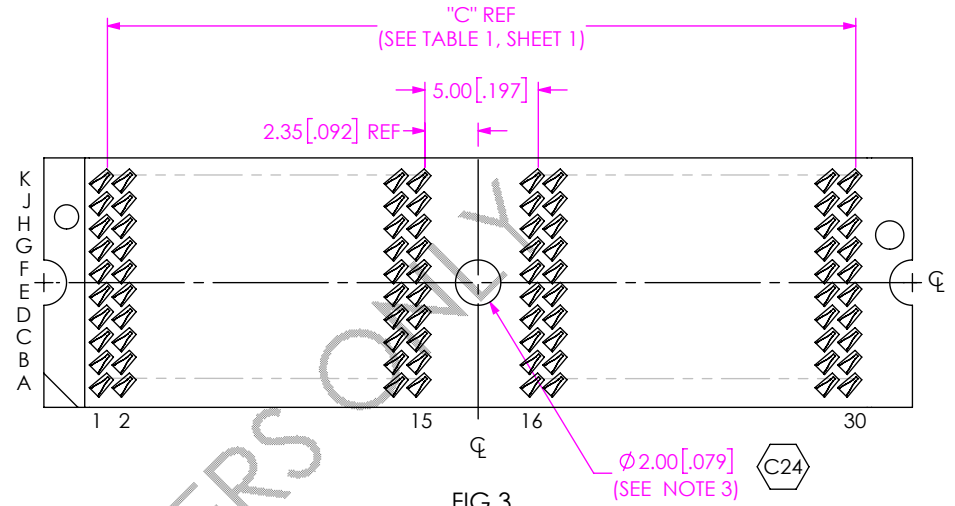


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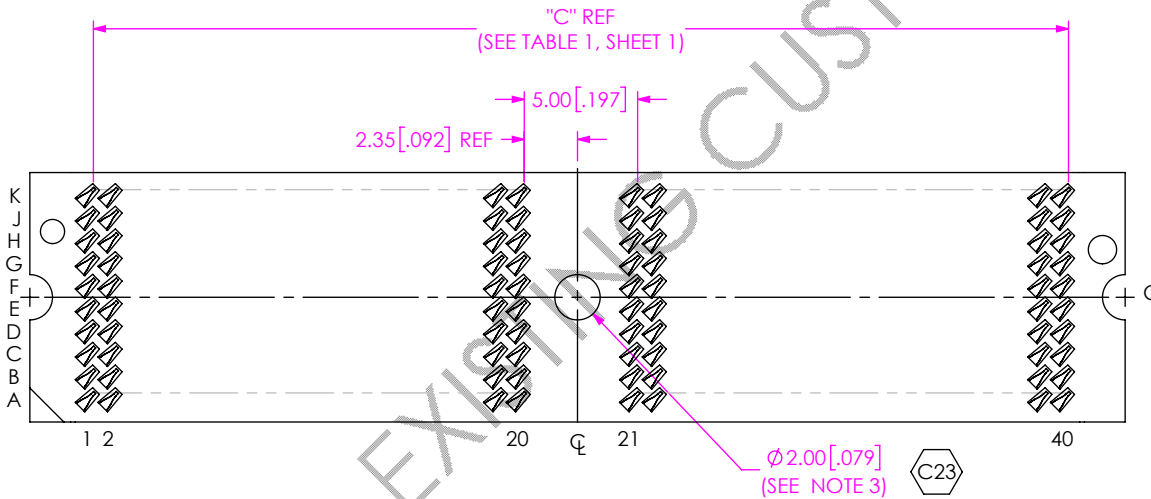
DESCRIPTION: 1.0mm PITCH ZRAY ASSEMBLY  
 DWG. NO. ZA1-XX-X-X.XX-X-XX-X  
 BY: D.SCHMELZ 01/08/2014 SHEET 2 OF 6



**FIG 2**  
 ZA1-20-2-1.00-X-10 SHOWN  
 (DUAL COMPRESSION)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
 (SOME CENTER FEATURES REMOVED FOR CLARITY)



**FIG 3**  
 ZA1-30-2-1.00-X-10 SHOWN  
 (DUAL COMPRESSION)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
 (SOME CENTER FEATURES REMOVED FOR CLARITY)



**FIG 4**  
 ZA1-40-2-1.00-X-10 SHOWN  
 (DUAL COMPRESSION)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
 (SOME CENTER FEATURES REMOVED FOR CLARITY)

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DO NOT SCALE DRAWING

SHEET SCALE: 3:1

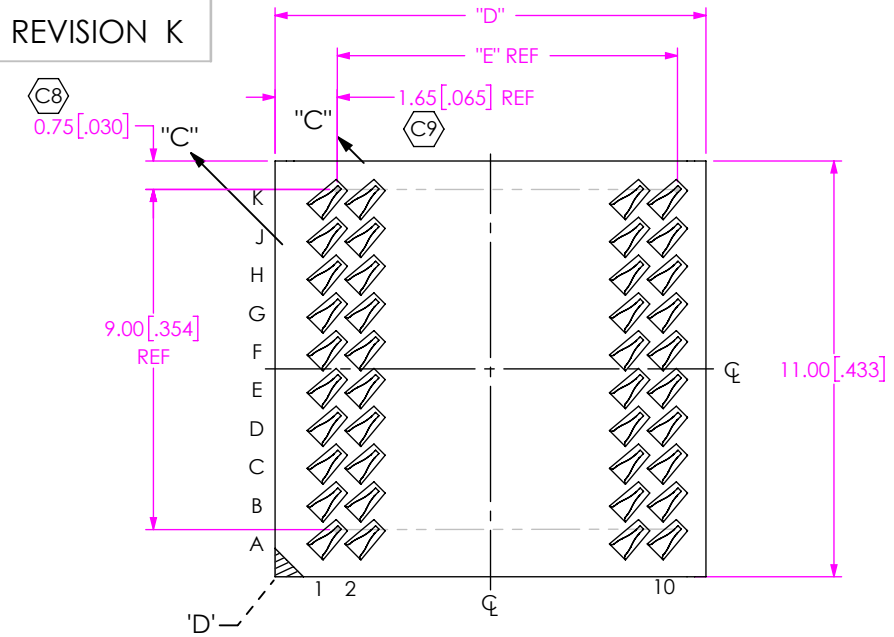


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 e-Mail info@SAMTEC.com code 55322

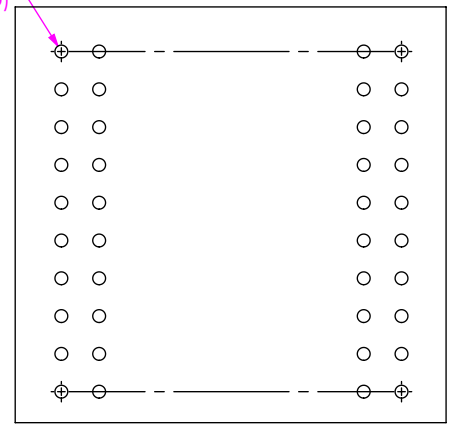
DESCRIPTION:  
 1.0mm PITCH ZRAY ASSEMBLY

DWG. NO.  
**ZA1-XX-X-X.XX-X-XX-X**

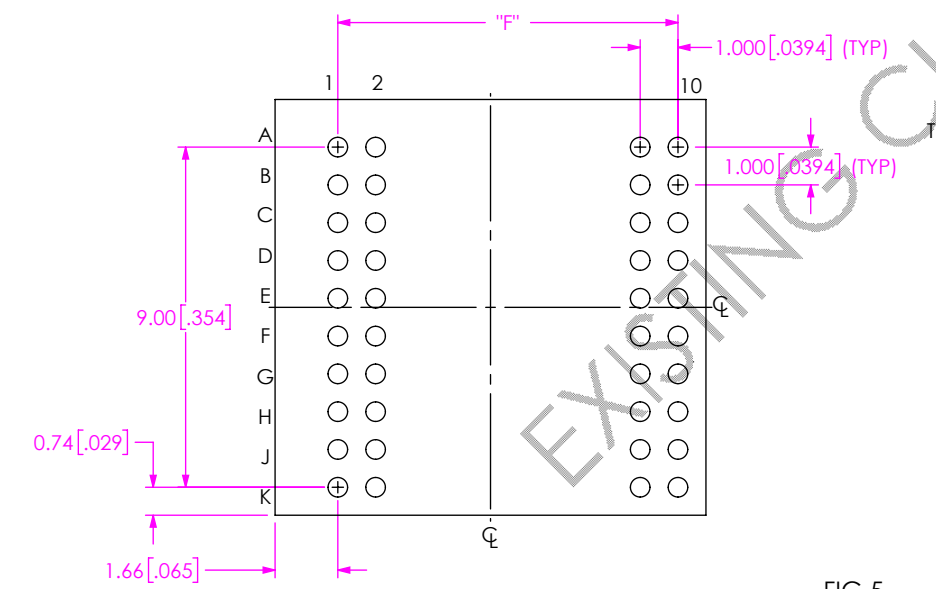
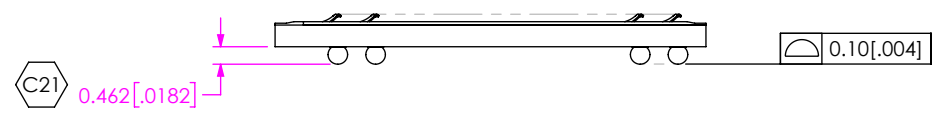
BY: D.SCHMELZ 01/08/2014 SHEET 3 OF 6



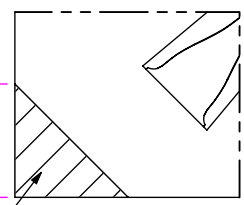
$\varnothing 0.34 \pm 0.06$  [0.13  $\pm$  0.02]  
(SOLDERMASK OPENING)  
(SEE NOTE 9)



IN-PROCESS



POSITION 1 INDICATOR  
THROUGH COVERFILM ONLY



DETAIL 'D'  
SCALE 20 : 1

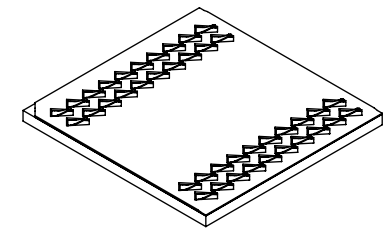


TABLE 4

No OF POS	"D"	"E"	"F"
-10	11.40 [0.449]	9.00 [0.354]	9.00 [0.354]
-20	21.40 [0.843]	19.00 [0.748]	19.00 [0.748]

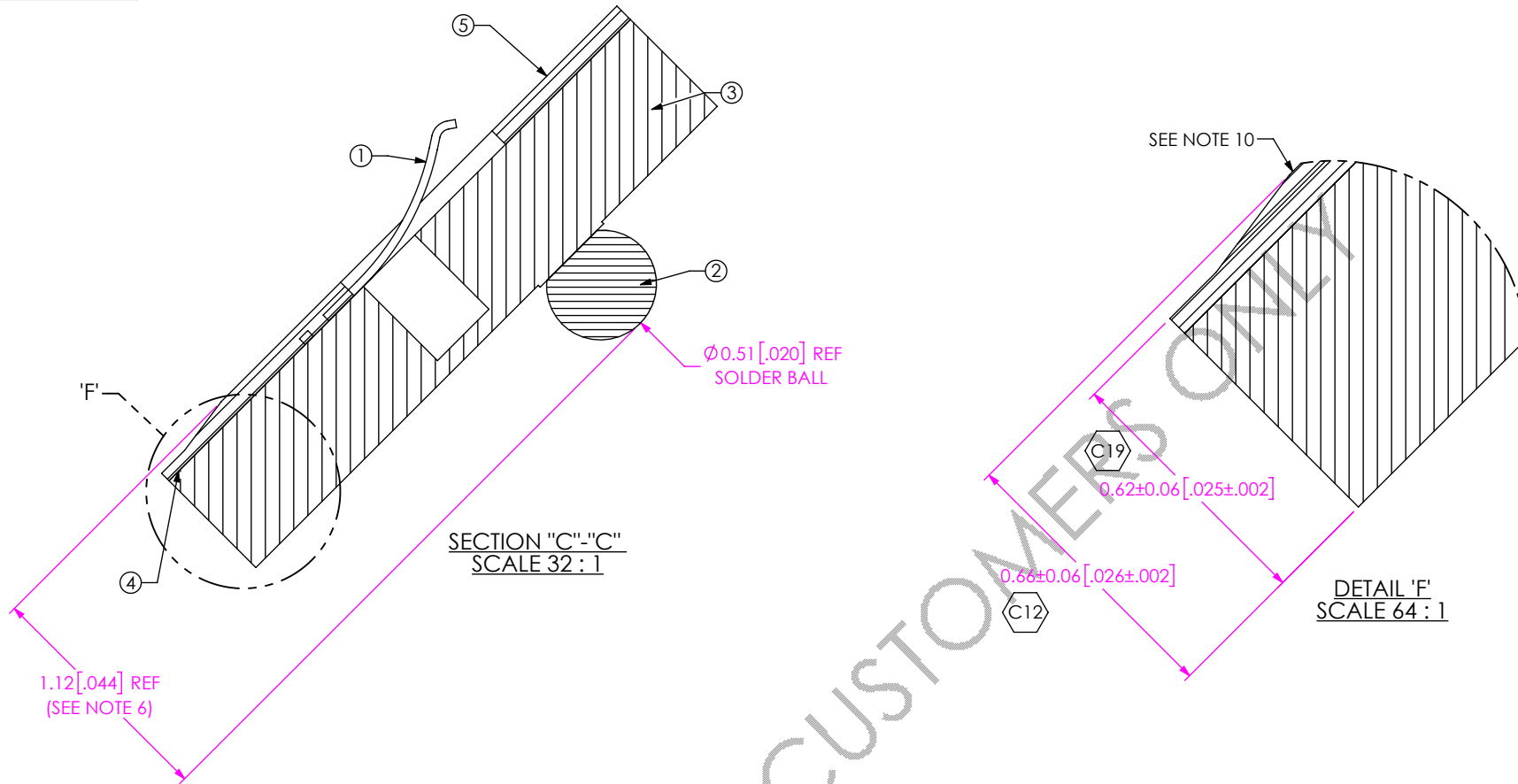
FIG 5  
ZA1-10-1-1.00-X-10-X SHOWN  
(SINGLE COMPRESSION)  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

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DO NOT SCALE DRAWING  
SHEET SCALE: 5:1

**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: 1.0mm PITCH ZRAY ASSEMBLY  
DWG. NO. ZA1-XX-X-X.XX-X-XX-X  
BY: D.SCHMELZ 01/08/2014 SHEET 4 OF 6



ZA1-XX-1-X.XX-X-XX-X BOM							
ITEM NO.	PART NUMBER	DESCRIPTION	10X10 QTY	20X10 QTY	30X10 QTY	40X10 QTY	MATERIAL
1	FOIL-0002-NS-01	CONTACT	.00667	.01667	.03333	.03333	BeCu
2	SDB-020-9653	SOLDER BALL	100	200	300	400	SEE CALLOUT
3	PCB-(SEE TABLE 3)	CORE	.00667	.01667	.03333	.03333	FR4
4	LF1535-6X9-0002	BOND FLY	.00667	.01667	.03333	.03333	ADHESIVE/POLYIMIDE FILM
5	ZCF-BL03-FR01-1209-BK	COVERFILM	.00334	.00834	.01667	.01667	ADHESIVE/POLYIMIDE FILM
6	PPP-77-11.00	P & P PAD	1	1	1	1	LCP
7	TRAY-(SEE TABLE 3)	TRAY	.02500	.02857	.04000	.05000	CLEAR ESD COATED RPET

No OF POS	COMPRESSION	PCB-106859-ZA1-XX-XX-01	CAM DATA	TRAY
-10	-1	PCB-106859-ZA1-10-10-01	ZR-00015	TY-ZA1005
-20	-1	PCB-106859-ZA1-20-10-01	ZR-00039	TY-ZA1006

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SHEET SCALE: 5:1



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

DESCRIPTION: 1.0mm PITCH ZRAY ASSEMBLY

DWG. NO. ZA1-XX-X-X.XX-X-XX-X

BY: D.SCHMELZ 01/08/2014 SHEET 5 OF 6

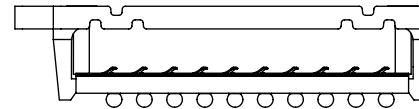
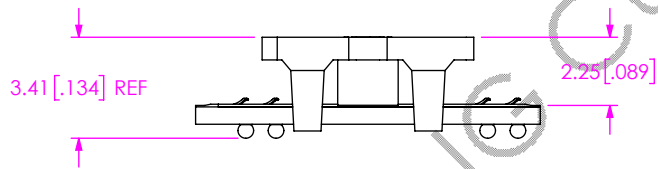
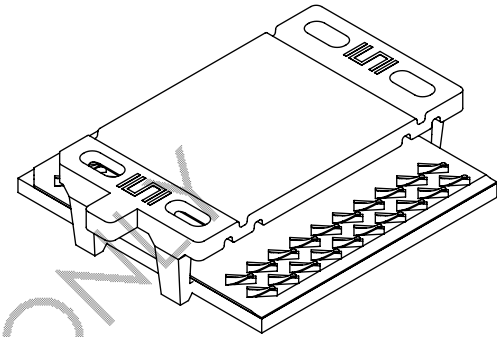
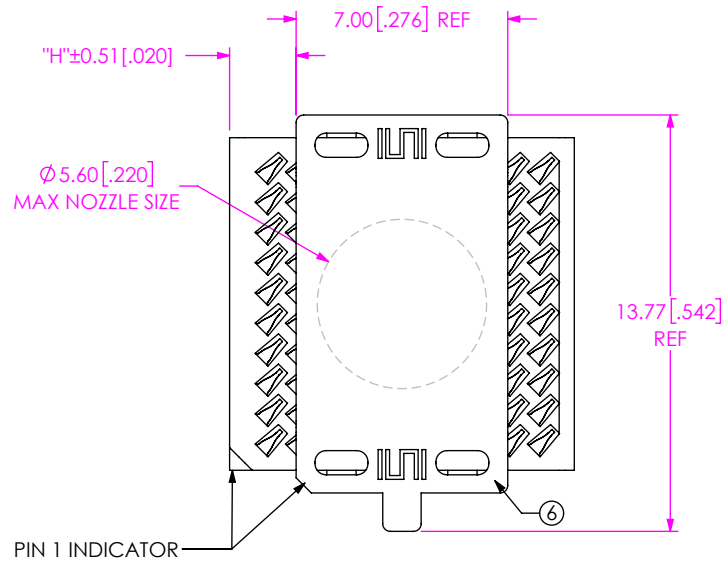


FIG 7  
ZA1-10-1-1.00-X-10-X SHOWN  
(SINGLE COMPRESSION WITH PPP)  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 6)  
(SOME CENTER FEATURES REMOVED FOR CLARITY)

No OF POS	"H"
-10	2.20 [.087]
-20	7.20 [.283]

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DO NOT SCALE DRAWING

SHEET SCALE: 3:1



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e-Mail info@SAMTEC.com code 55322

DESCRIPTION: 1.0mm PITCH ZRAY ASSEMBLY

DWG. NO. ZA1-XX-X-X.XX-X-XX-X

BY: D.SCHMELZ 01/08/2014 SHEET 6 OF 6