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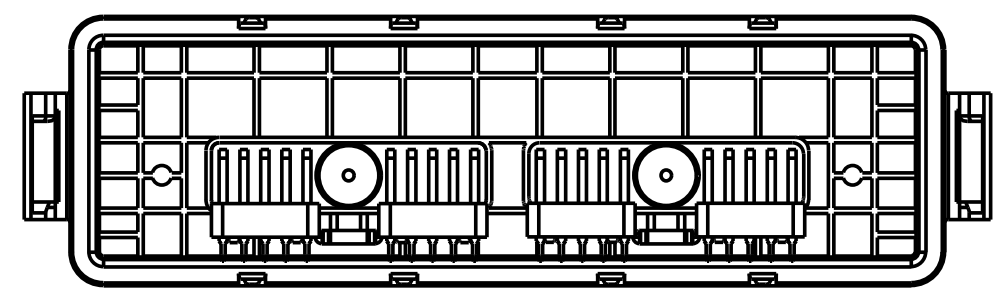
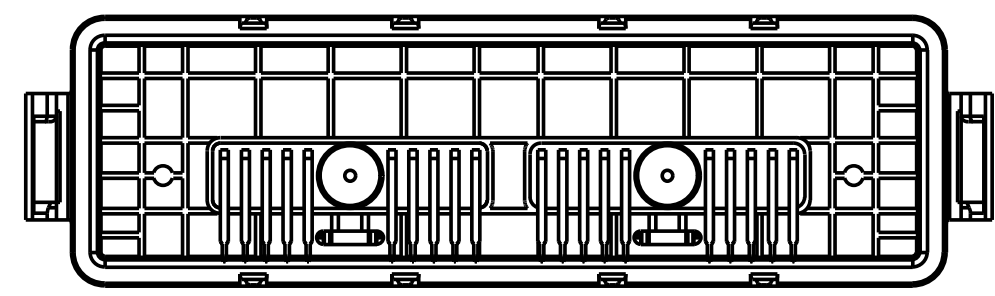
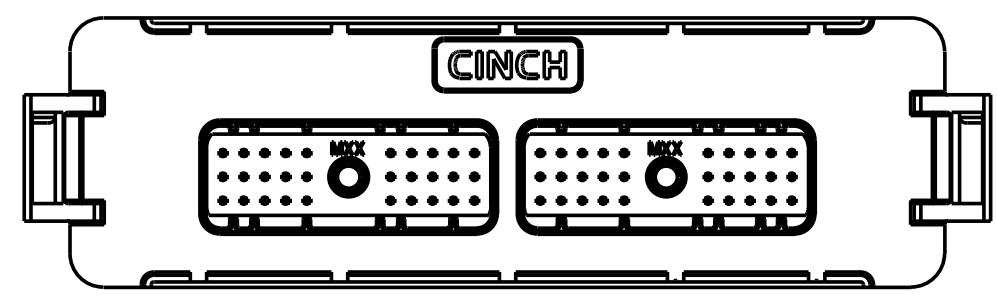
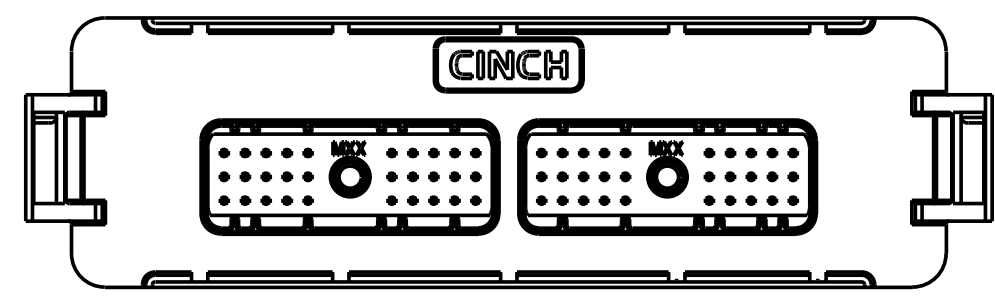
# CINCH PART NUMBER MATRIX

## P/N: 581 01 60 005

## P/N: 581 01 60 006

### 60-WAY HEADER ASSEMBLY WITHOUT FERRITE FILTERS

### 60-WAY HEADER ASSEMBLY WITH FERRITE FILTERS



MATES WITH CINCH HARNESS CONNECTORS P/N:  
581 01 30 028 (30-WAY) AND 581 01 30 029 (30-WAY)

DRAWING REVISIONS			
REV	DOCUMENT	APP	DATE
A	D.O. 05-1217 REL. FOR PRODUCTION	A.C.	9/9/05
B	ECN: 05A634 ADDED SHEET 5 ADDED SHEET 6 MODIFIED SHEET 3 MODIFIED SHEET 4	A.C.	3/23/06
C	ECN: 06A477 REFORMATTED DRAWING PCB LAYOUTS REDRAWN WITH ADDITIONAL KEEP OUT AREAS	A.C.	1/8/07

#### NOTE:

- ALL DIMENSIONS ARE IN INCHES; DIMENSIONS INSIDE [.XX] ARE IN mm, AS REF. ONLY.
- MATERIALS:  
INTERFACE SEAL: SILICONE RUBBER, COLOR BLUE;  
INSULATOR: 30 % GLASS FILLED POLYMER, COLOR BLACK;  
BUSHING: BRASS ALLOY, UNPLATED 10-24 UNC THREAD;  
TERMINAL BLADE: 1.5 mm BRASS WITH TIN OVER NICKEL PLATING;  
FILTERS: FERRITE BLOCKS.
- ALL HEADERS ARE REFLOW AND WAVE SOLDERING PROCESS, ROHS COMPLIANT.
- MATES WITH CINCH SHS PUSH-TO-SEAT HARNESS CONNECTORS (SEE TABLE ABOVE).
- THERMALLY CONDUCTIVE ADHESIVE PASTE SOLD SEPARATELY: RECOMMENDED IS LOCTITE 383.
- MOSFET SPRING PLATES ARE SOLD SEPARATELY (FOR INSTALLATION REFER TO ENCLOSURE ASSEMBLY INSTRUCTIONS) SPRING LABELED AS "L" IS CINCH P/N: 581 00 00 020 AND SPRING LABELED AS "R" IS CINCH P/N: 581 00 00 021. (IT IS RECOMMENDED THAT THE 4 SLOTS BE PROTECTED DURING CONFORMAL COATING)
- STANDARD PACKAGE SIZE: 36 PARTS/CARTON BOX.

UNITS		RoHS COMPLIANT		MODELED BY:	
ENGLISH		PRO/E		Cinch	
DO NOT SCALE DRAWING		DRAWN BY	DATE	TITLE	
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		B. KOSTIC	9/02/05	60-WAY HEADERS LE MODICE	
FILLET/RADII .02 MAX		DESIGN ENGINEER		MATERIAL	
TOLERANCES		B. KOSTIC	9/02/05	CONTROL SPEC NUMBER	
X ± .1		DESIGN ENGINEERING MGR.		MATERIAL SPEC NUMBER	
.XX ± .01		A. CAINES	9/5/05	FINISH	
.XXX ± .005		MFG. ENGINEERING		PROJECT NUMBER	
ANGULAR ± .5°		R. GARZA	9/15/05	A 14562	
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH		QUALITY ASSURANCE		CAGE IDENT NO.	
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		SCALE		DRAWING NUMBER	
		B		581 01 60 005S	
		7:10		SHEET 1 OF 6	

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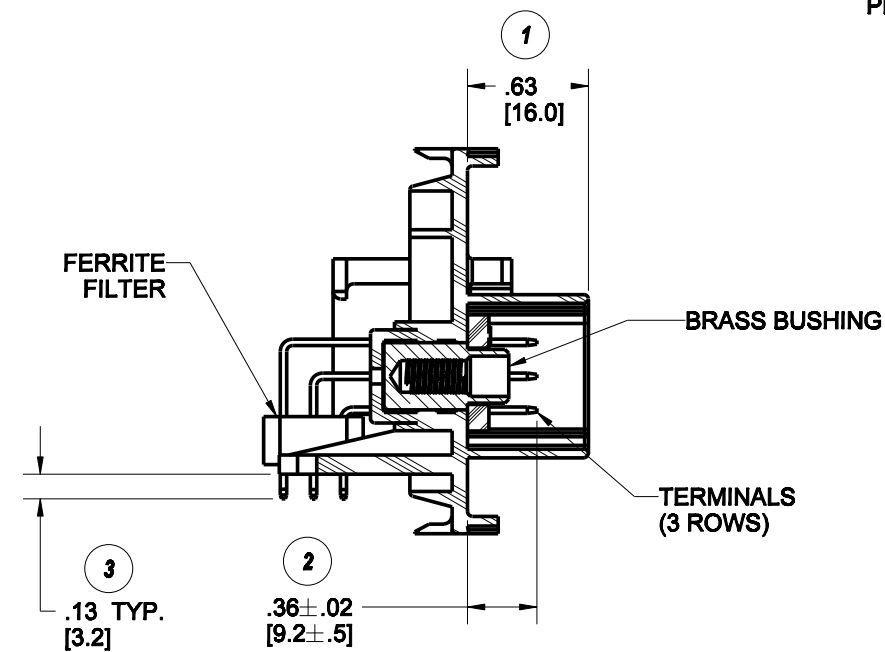
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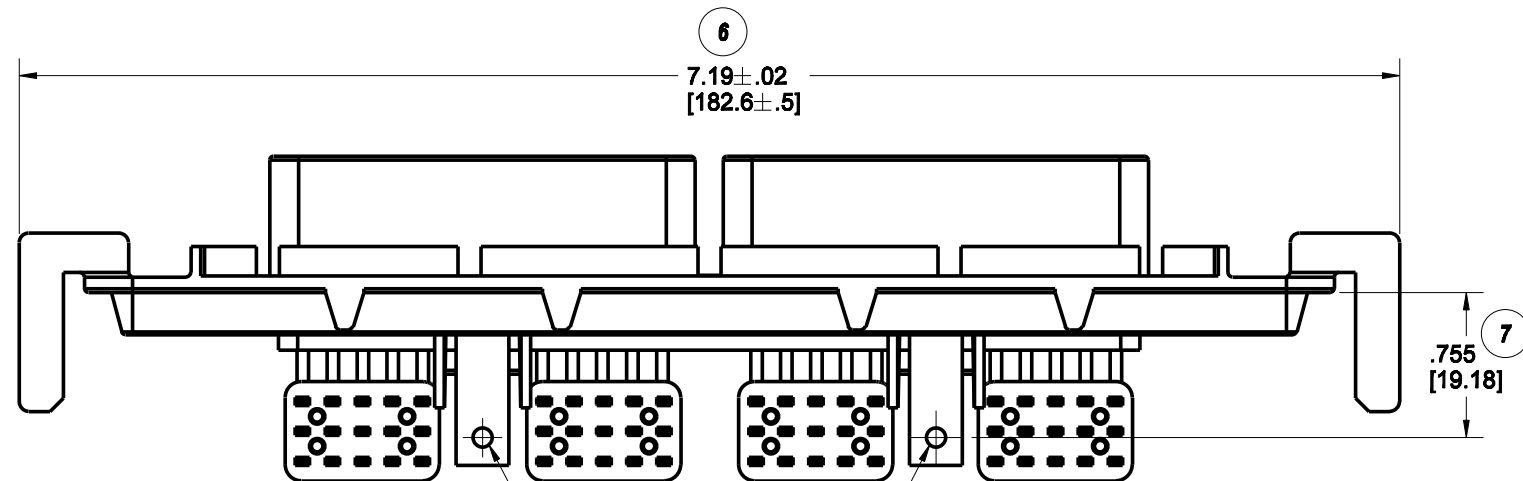
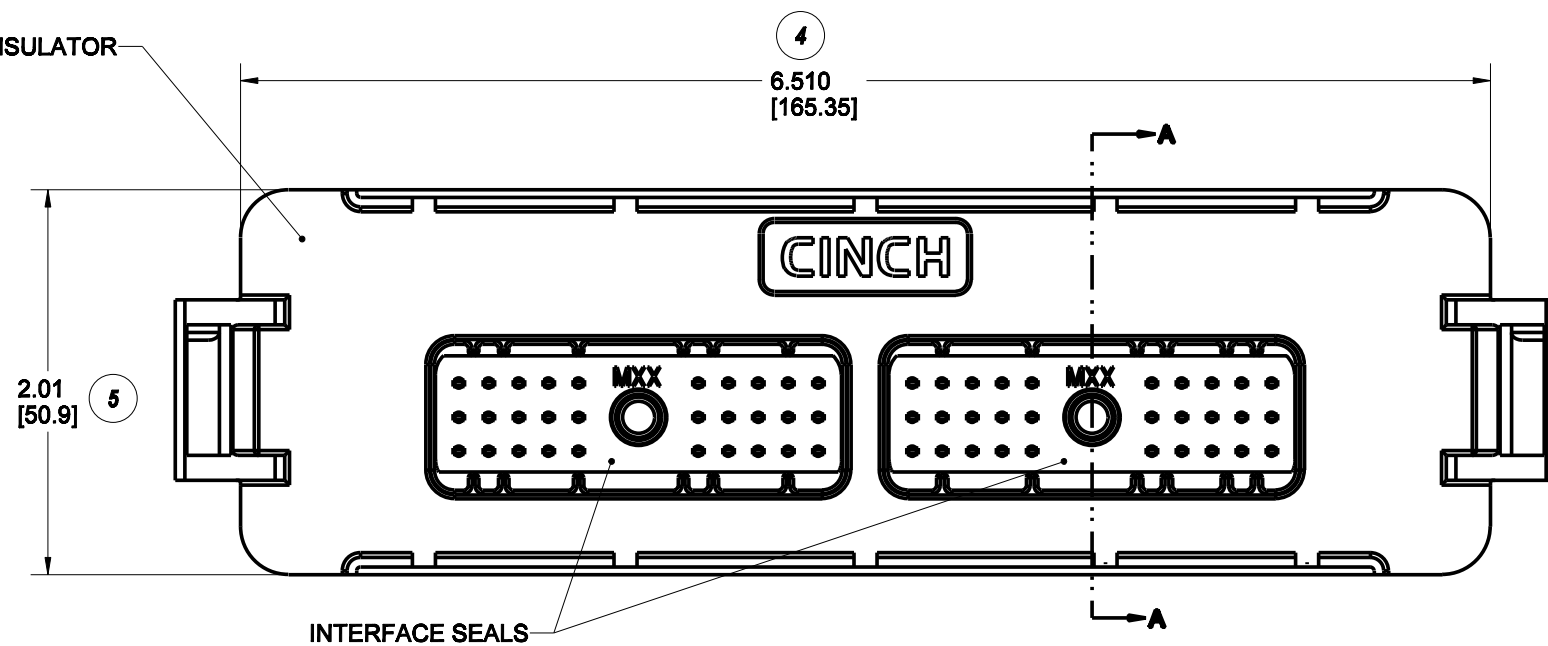
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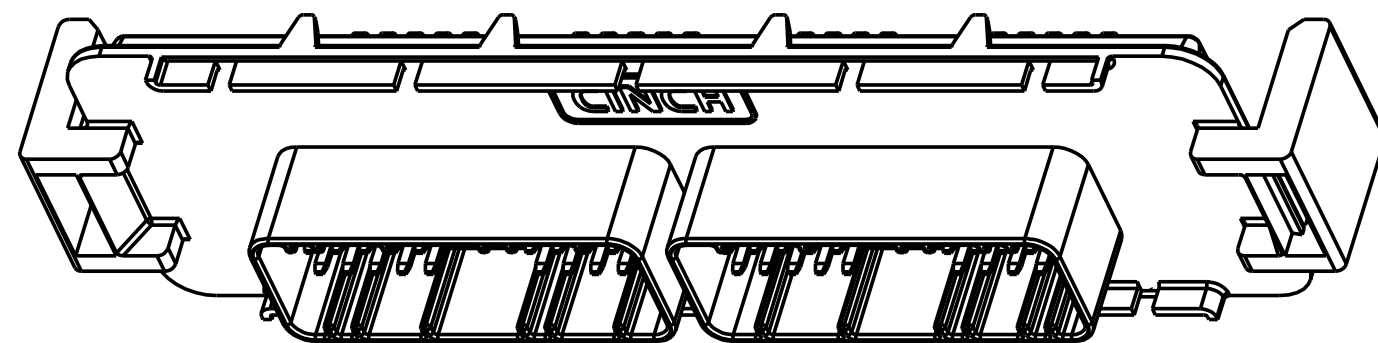


PLASTIC INSULATOR



FOR PCB MOUNTING, #4 SELF-TAPPING SCREW IS RECOMMENDED, TORQUE 2-3 IN. LBS. [0.23 - 0.34 Nm]

**CINCH P/N: 581 01 60 006 SHOWN  
(HEADER WITH FILTERS)**



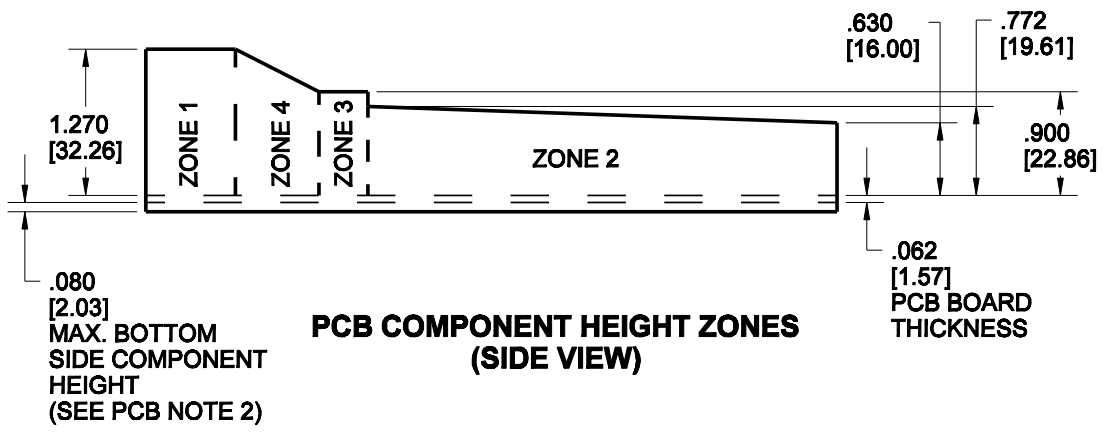
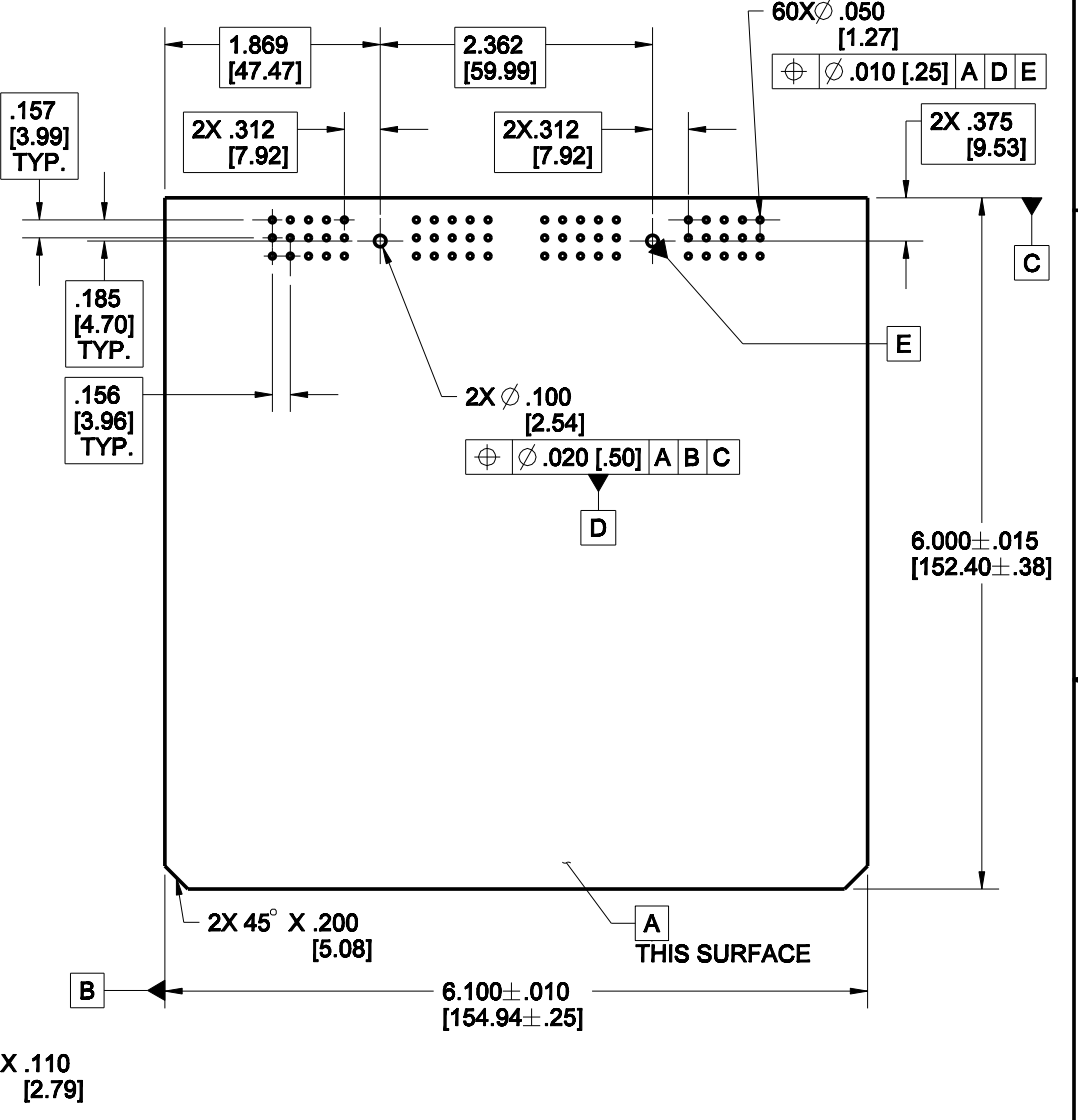
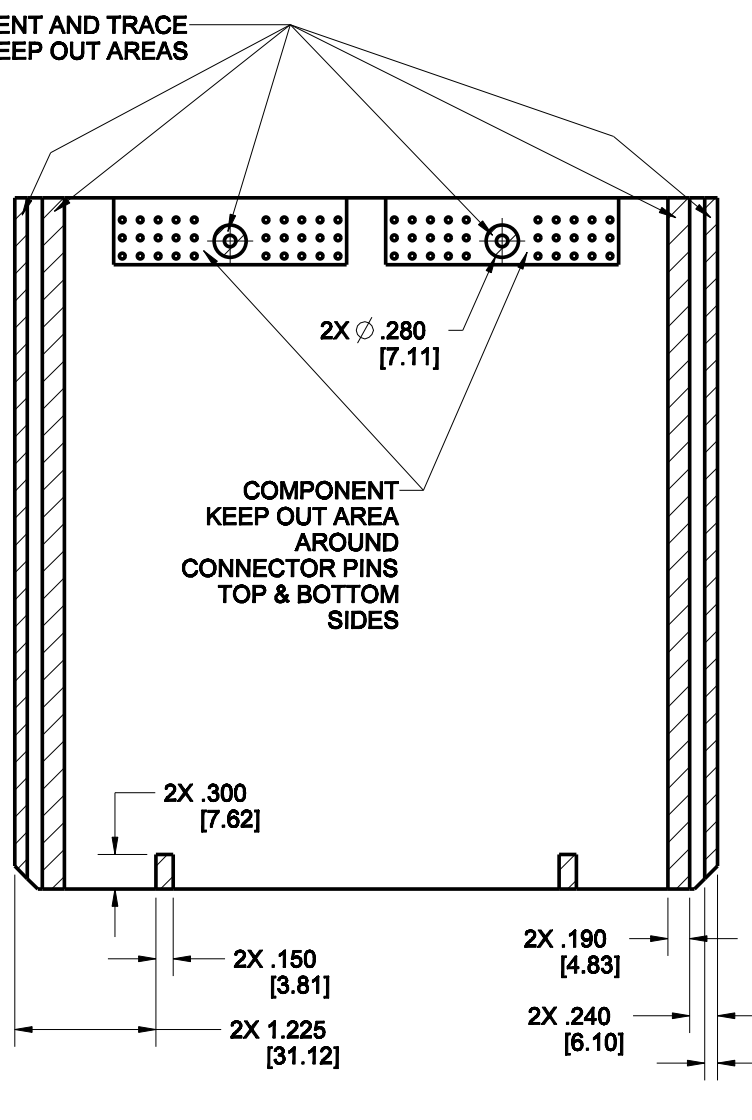
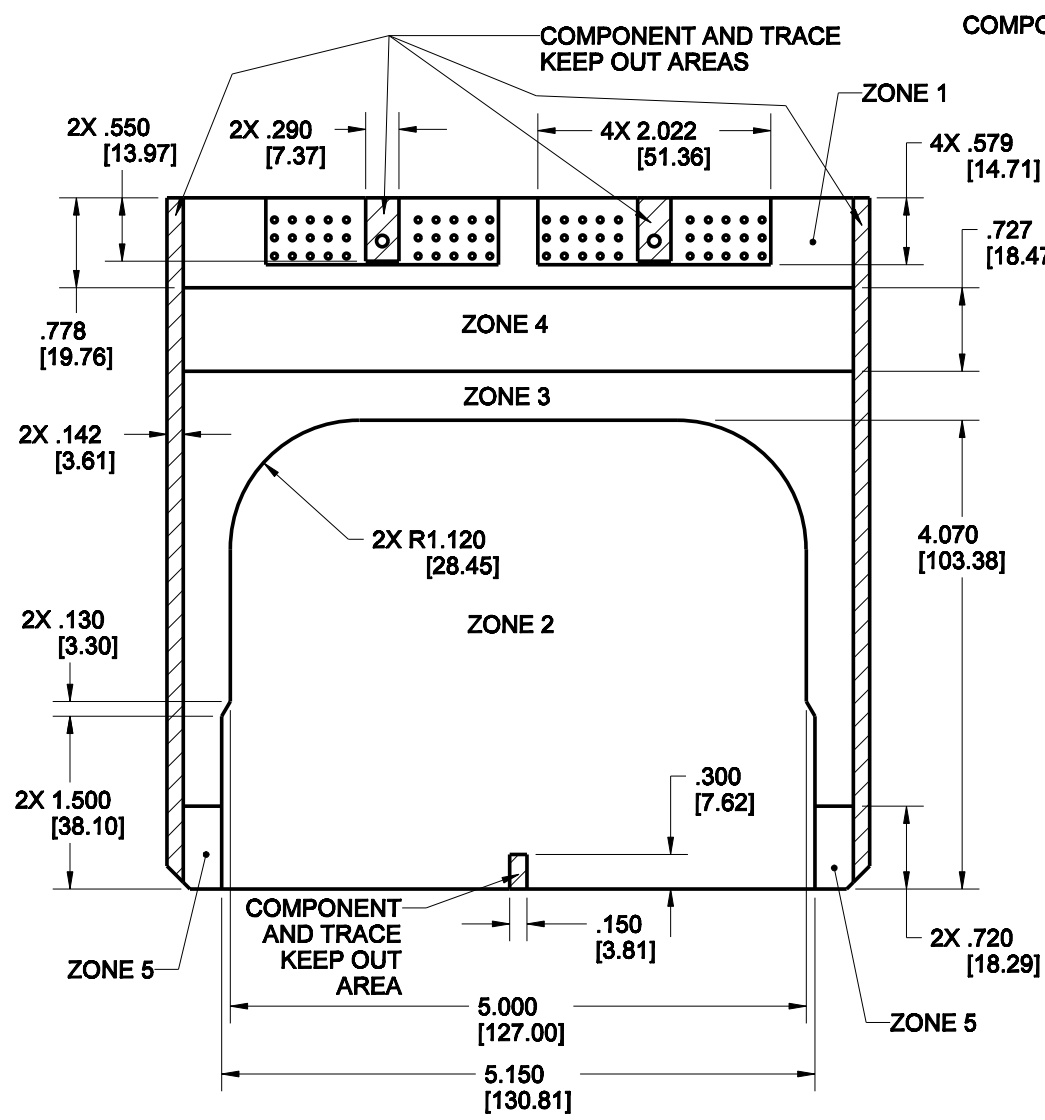
UNITS <b>ENGLISH</b>		<b>Cinch</b>		1700 FINLEY RD LOMBARD, IL 60148
DO NOT SCALE DRAWING		TITLE <b>60-WAY HEADERS LE MODICE</b>		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		PRO/E DRAWING		
FILLET/RADI .02 MAX	TOLERANCES X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5	CAD FILE NUMBER 5810160006_HEADER	DRAWING NUMBER <b>581 01 60 005S</b>	REV <b>C</b>
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		SHEET 2 OF 6		

# PCB LAYOUT WITHOUT HEAT SINKS

**PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS**

**PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS**

**PCB OVERALL DIMENSIONS AND HOLE LOCATIONS**



PCB COMPONENTS HEIGHT LIMIT					
	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.270"	SEE PCB NOTE 3	.900"	SEE PCB NOTE 3	.420"

**PCB NOTES:**

- ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB.
- THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 6 SIDE VIEW).
- AREA HAS VARIABLE HEIGHT. SEE PCB COMPONENT HEIGHT ZONES VIEW FOR DETAILS.

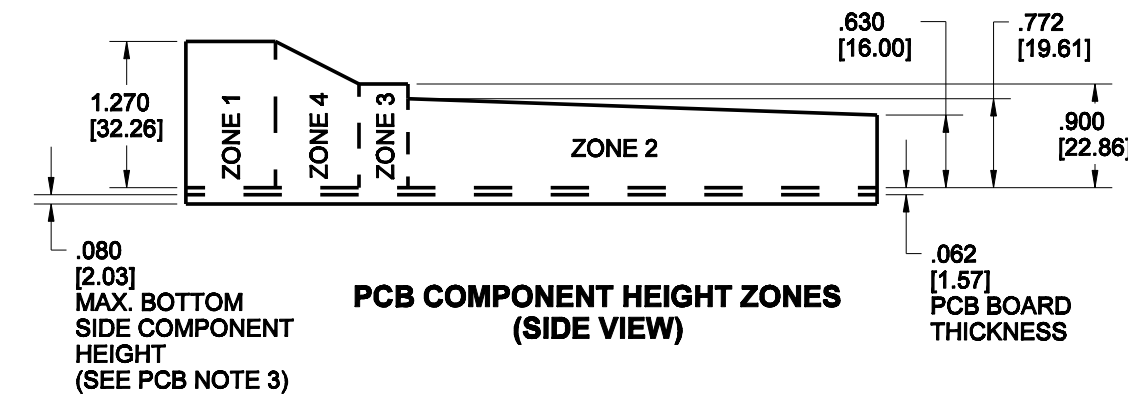
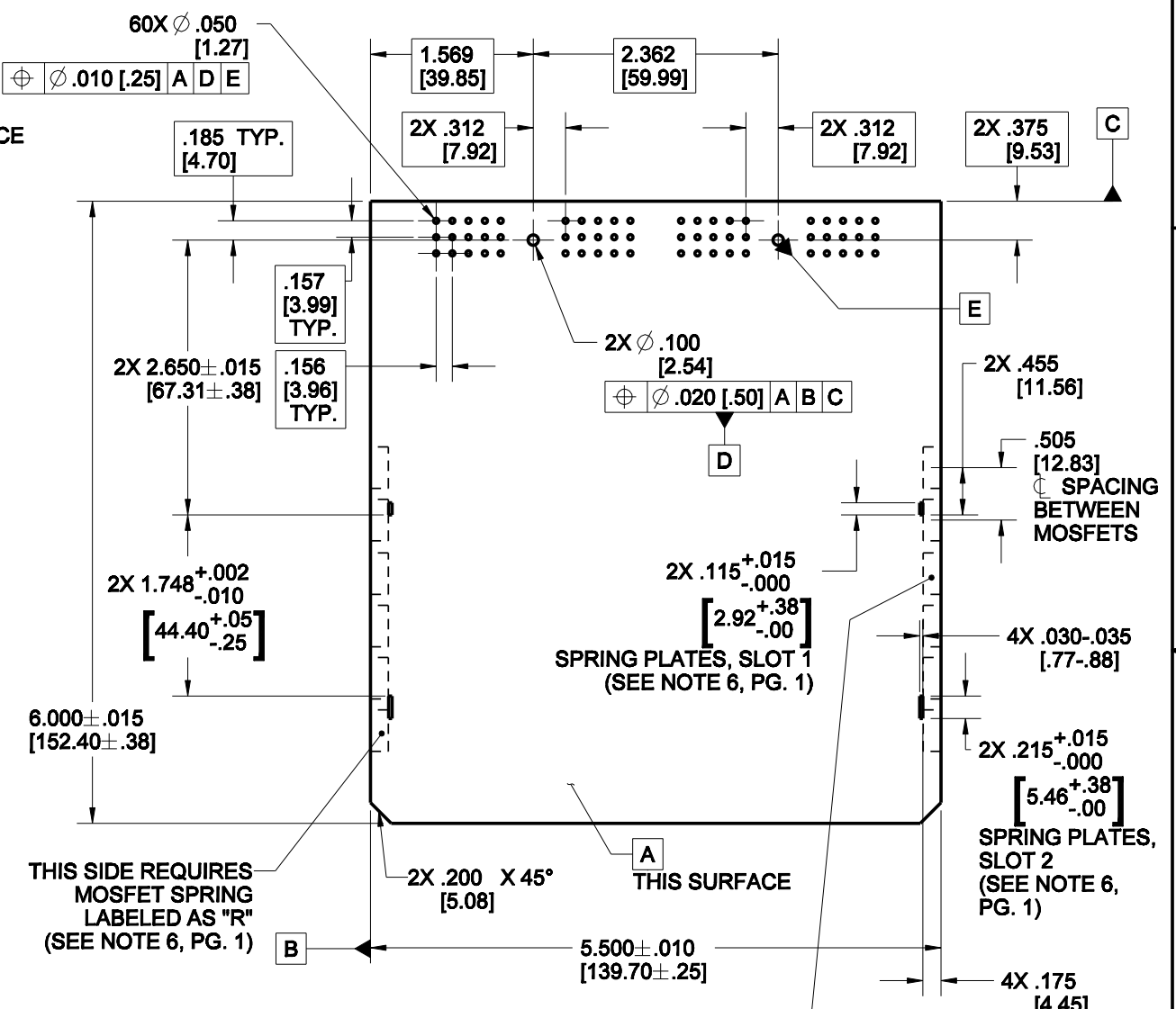
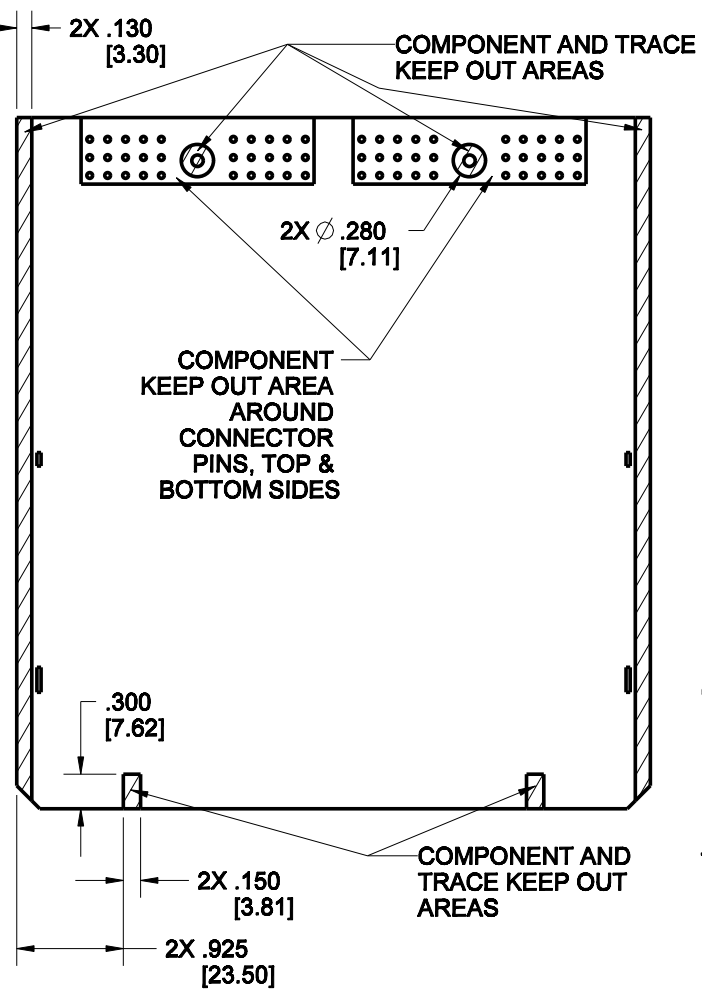
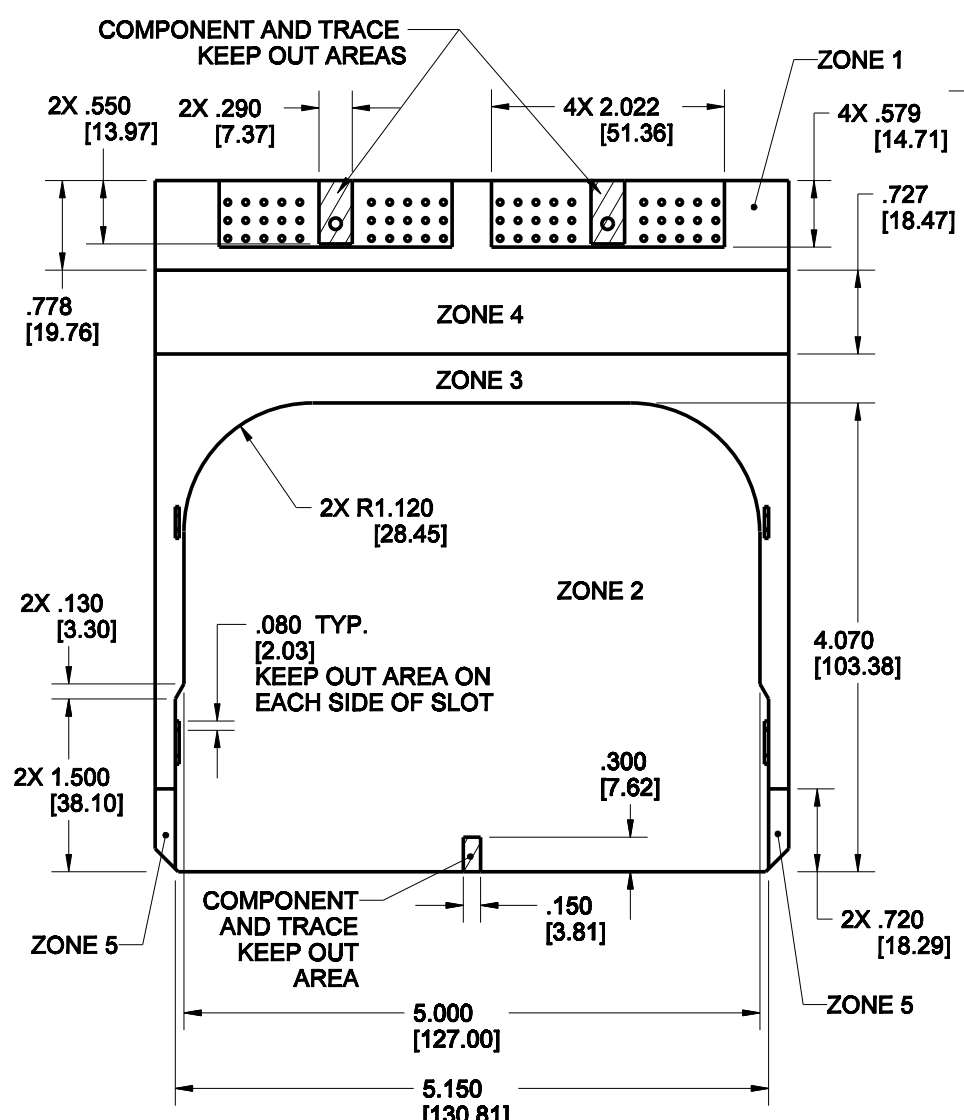
UNITS	ENGLISH		<b>Cinch</b>		1700 FINLEY RD LOMBARD, IL 60148	
DO NOT SCALE DRAWING					TITLE	
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES			PRO/E DRAWING			
FILLET/RADI .02 MAX			TOLERANCES		CAGE IDENT NO.	
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH			X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5		5810180006_HEADER	
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			71785		C	
			SCALE		SHEET 3 OF 6	
			3:5			

# PCB LAY-OUT WITH TWO HEAT SINKS

## PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

## PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS

## PCB OVERALL DIMENSIONS AND HOLE LOCATIONS



PCB COMPONENTS HEIGHT LIMIT					
	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.270"	SEE PCB NOTE 4	.900"	SEE PCB NOTE 4	.420"

- PCB NOTES:**
- IF MOSFET SPRINGS ARE USED, ZONE 3 SHOULD CONTAIN ONLY MOSFETS AND TRACES BETWEEN THE SPRINGS AND EDGE OF THE BOARD.
  - ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB.
  - THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 6 SIDE VIEW).
  - AREA HAS VARIABLE HEIGHT. SEE PCB COMPONENT HEIGHT ZONES VIEW FOR DETAILS.

MOSFET LOCATION(S)  
MAX. 6 TO-220 STYLE  
MOSFETS PER SIDE  
THIS SIDE REQUIRES  
MOSFET SPRING  
LABELED AS "L"  
(SEE NOTE 6, PG. 1)

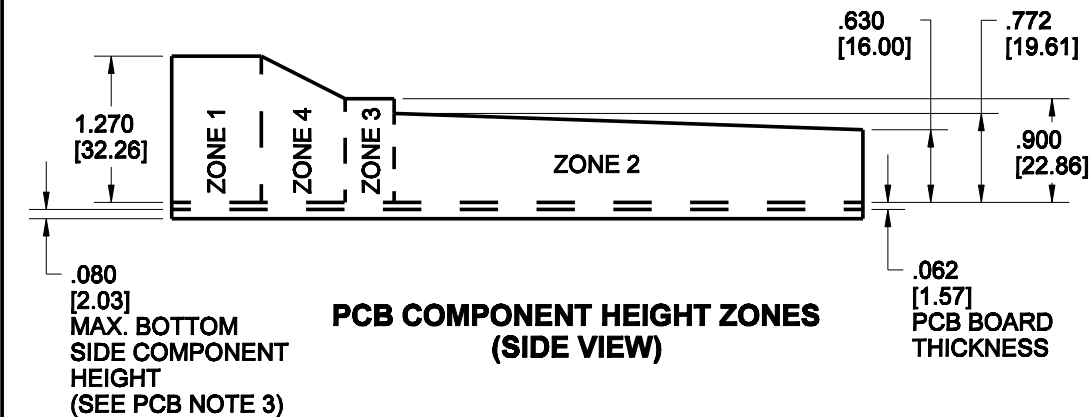
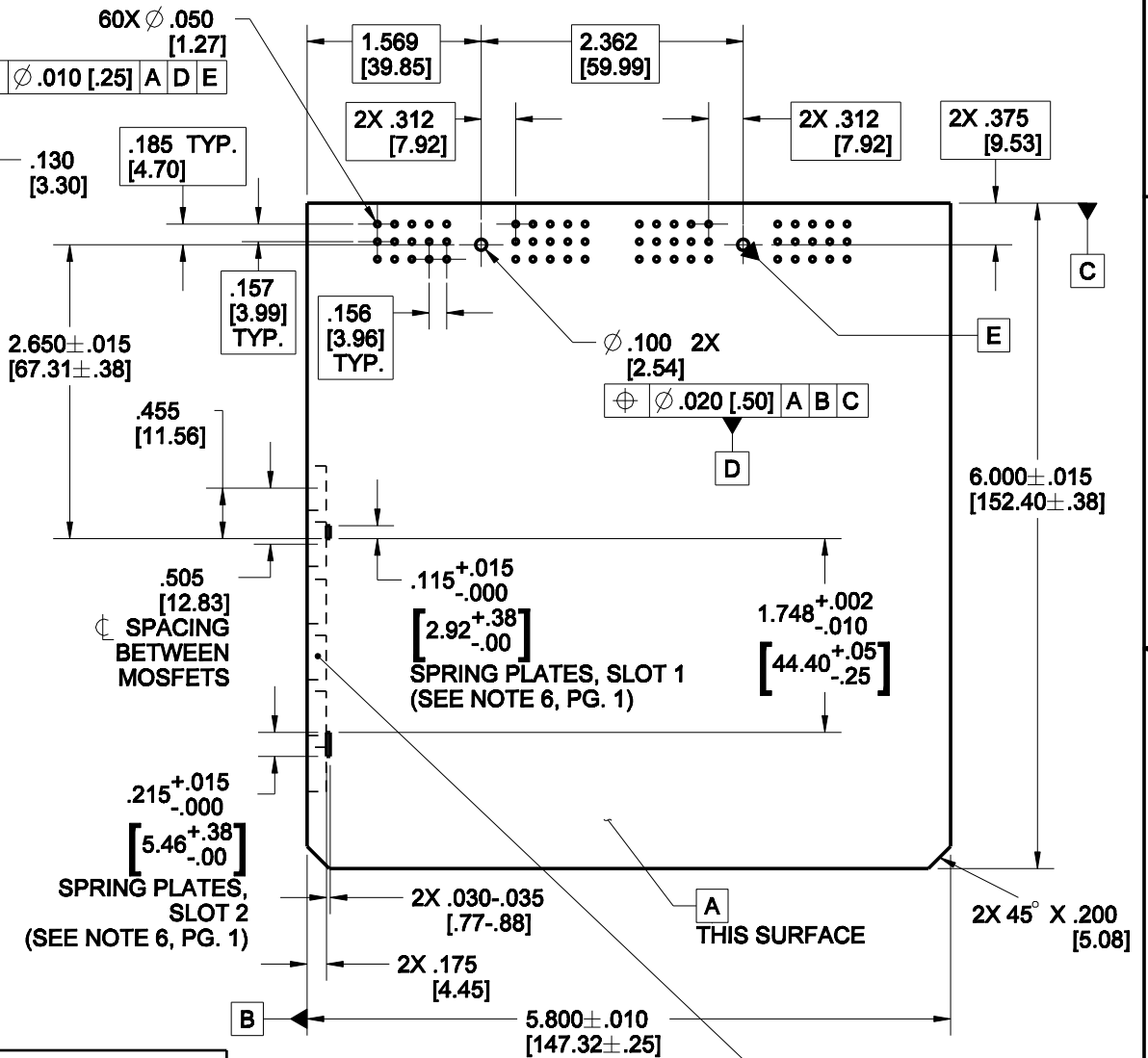
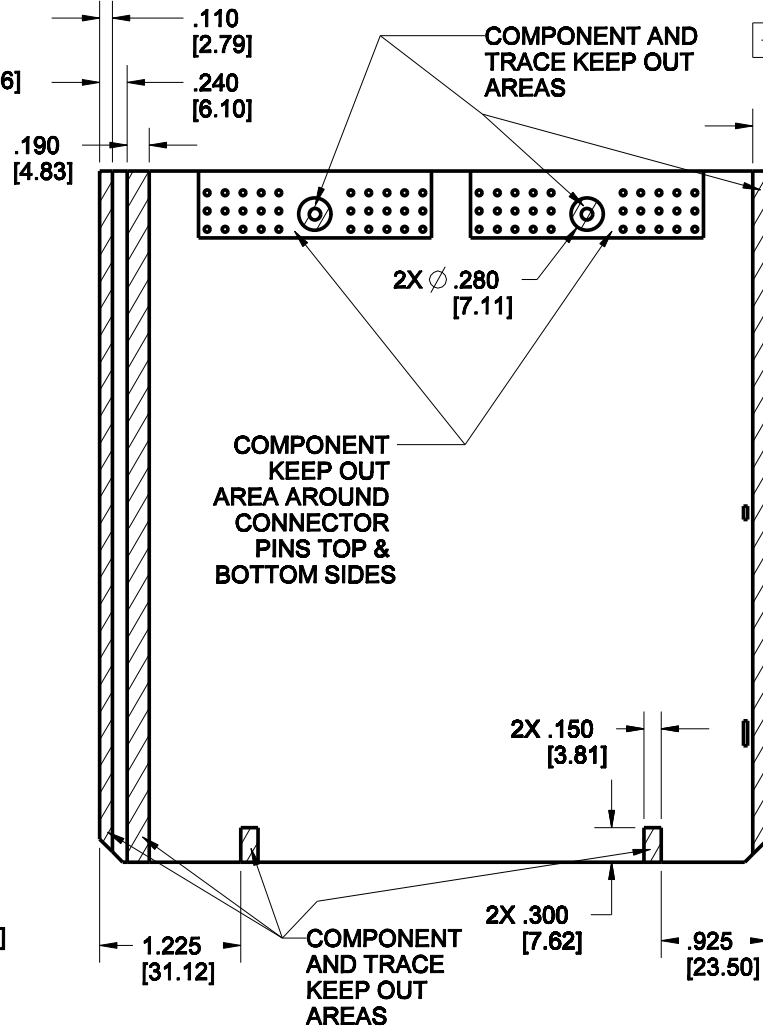
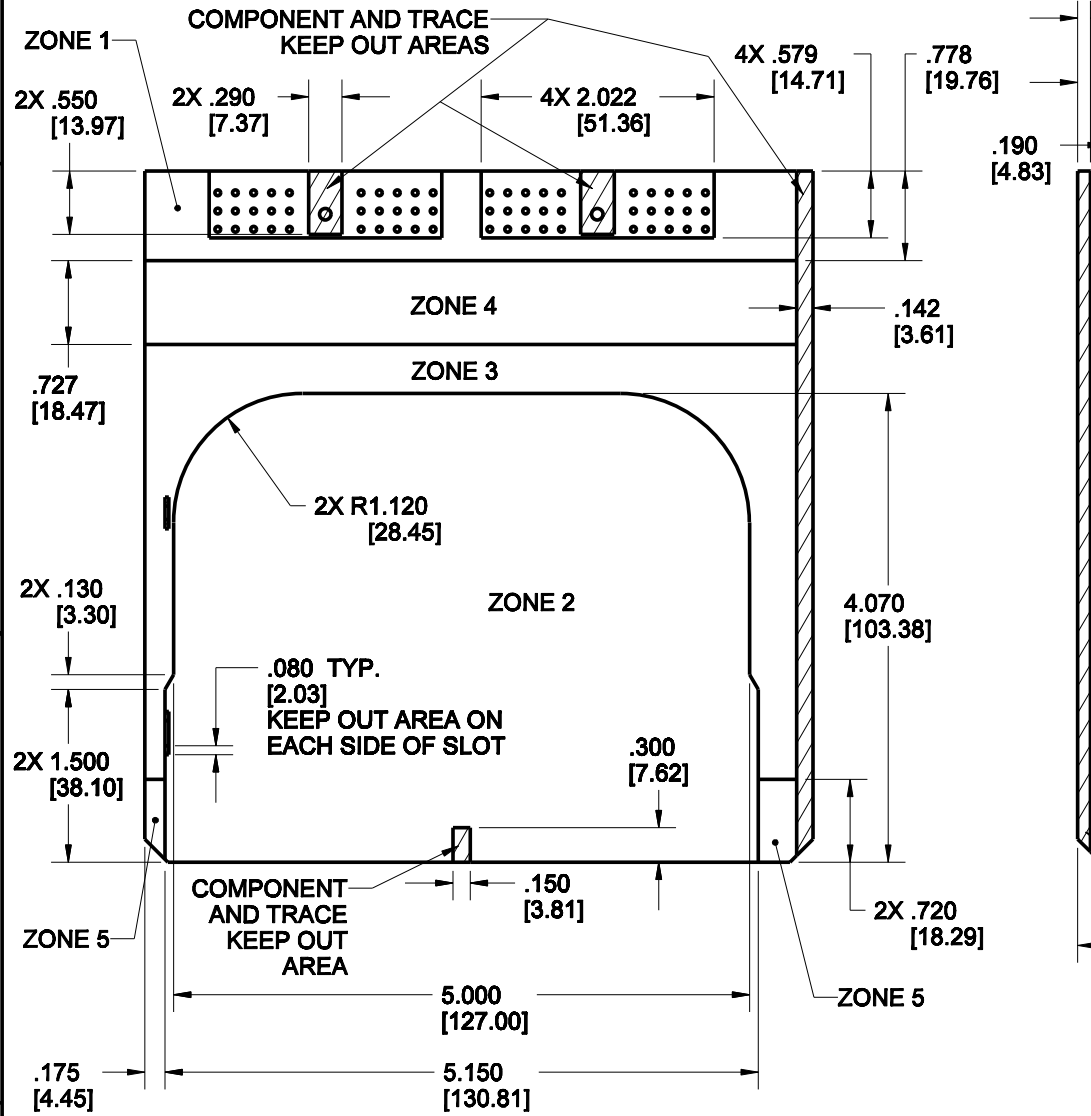
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DO NOT SCALE DRAWING					TITLE	
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES			PRO/E DRAWING			
FILLET/RADI .02 MAX			TOLERANCES		CAD FILE NUMBER	
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH			X $\pm$ .1 .XX $\pm$ .01 .XXX $\pm$ .005 ANGULAR $\pm$ .5		DRAWING NUMBER	
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			CAGE IDENT NO.		REV	
			71785		C	
			SIZE		SCALE	
			B		3:5	
					SHEET 4 OF 6	

# PCB LAY-OUT WITH ONE HEAT SINK

## PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

## PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS

## PCB OVERALL DIMENSIONS AND HOLE LOCATIONS



### PCB COMPONENTS HEIGHT LIMIT

	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.270"	SEE PCB NOTE 4	.900"	SEE PCB NOTE 4	.420"

- PCB NOTES:**
- IF MOSFET SPRINGS ARE USED, ZONE 3 SHOULD CONTAIN ONLY MOSFETS AND TRACES BETWEEN THE SPRINGS AND EDGE OF THE BOARD.
  - ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB.
  - THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 6 SIDE VIEW).
  - AREA HAS VARIABLE HEIGHT. SEE PCB COMPONENT HEIGHT ZONES VIEW FOR DETAILS.

MOSFET LOCATION(S) MAX. 6 TO-220 STYLE MOSFETS THIS SIDE ONLY THIS SIDE REQUIRES MOSFET SPRING LABELED AS "R" (SEE NOTE 6, PG. 1)

UNITS <b>ENGLISH</b>	<b>Cinch</b> 1700 FINLEY RD LOMBARD, IL 60148	
DO NOT SCALE DRAWING		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES	TITLE <b>60-WAY HEADERS LE MODICE</b>	
FILLET/RADI .02 MAX	PRO/E DRAWING	
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH	CAGE IDENT NO. <b>71785</b> SIZE <b>B</b> SCALE <b>3:5</b> SHEET <b>5 OF 6</b>	
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	REV <b>C</b>	

8 7 6 5 4 3 2 1

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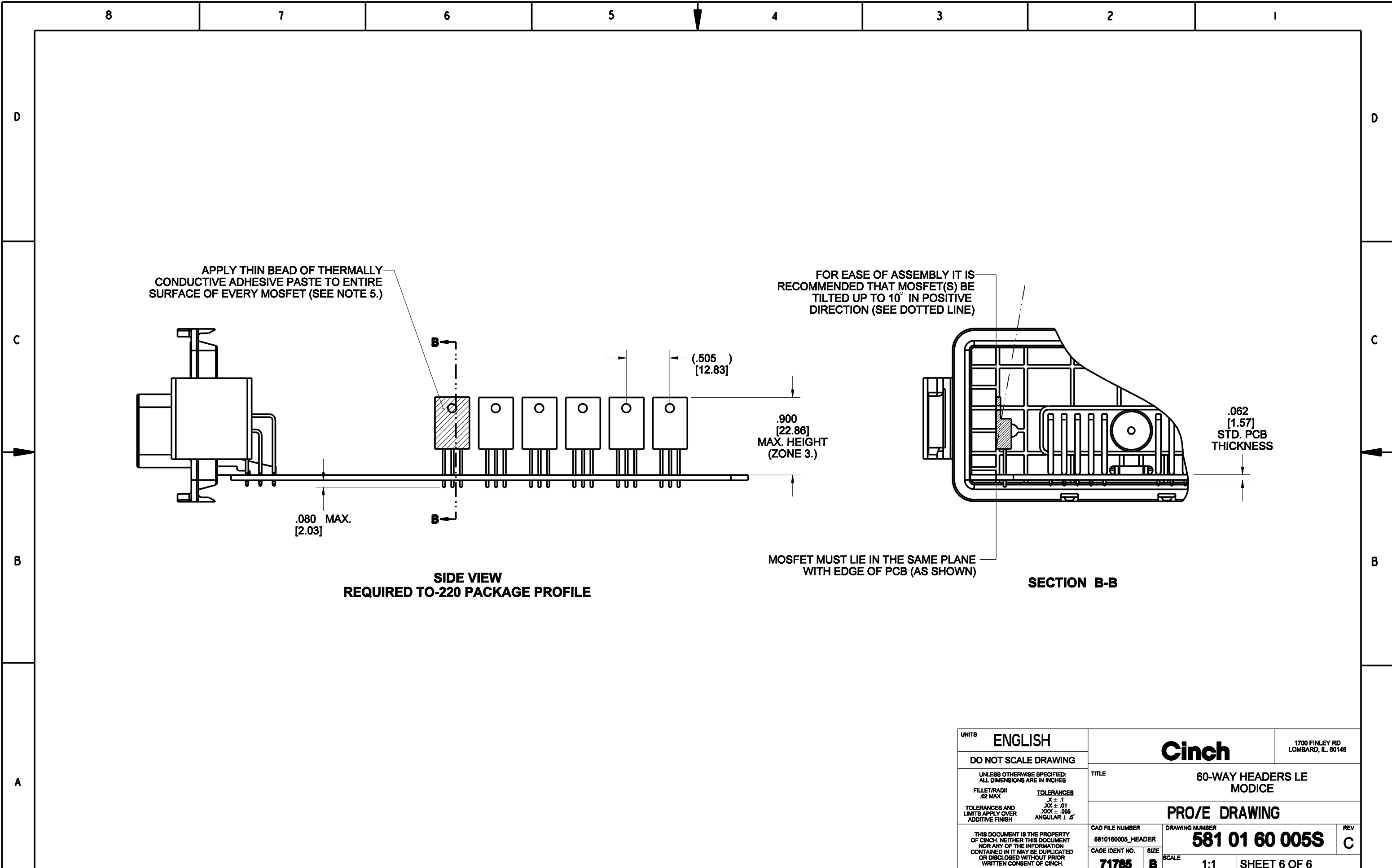
C

B

B

A

A



APPLY THIN BEAD OF THERMALLY CONDUCTIVE ADHESIVE PASTE TO ENTIRE SURFACE OF EVERY MOSFET (SEE NOTE 5.)

FOR EASE OF ASSEMBLY IT IS RECOMMENDED THAT MOSFET(S) BE TILTED UP TO 10° IN POSITIVE DIRECTION (SEE DOTTED LINE)

**SIDE VIEW  
REQUIRED TO-220 PACKAGE PROFILE**

**SECTION B-B**

MOSFET MUST LIE IN THE SAME PLANE WITH EDGE OF PCB (AS SHOWN)

UNITS	ENGLISH				1700 FINLEY RD LOMBARD, IL 60148	
DO NOT SCALE DRAWING						
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES			TITLE			
FILLET/RADI .02 MAX TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH			60-WAY HEADERS LE MODICE  <b>PRO/E DRAWING</b>			
TOLERANCES X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5			CAD FILE NUMBER	DRAWING NUMBER	REV	
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			CAGE IDENT NO.	SCALE	SHEET 6 OF 6	
			<b>71785</b>	<b>B</b>	1:1	

8 7 6 5 4 3 2 1

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