

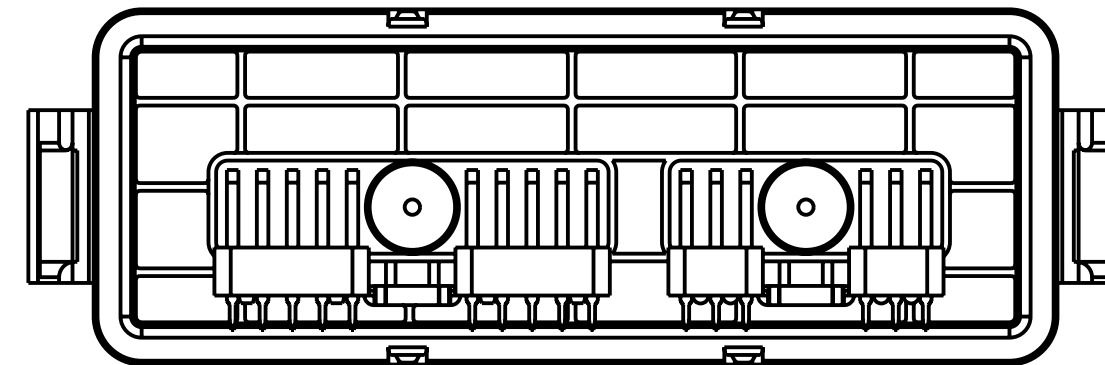
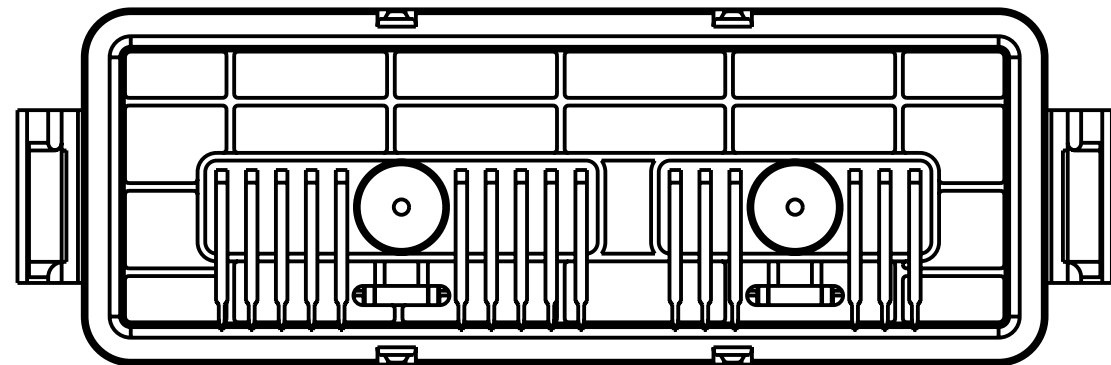
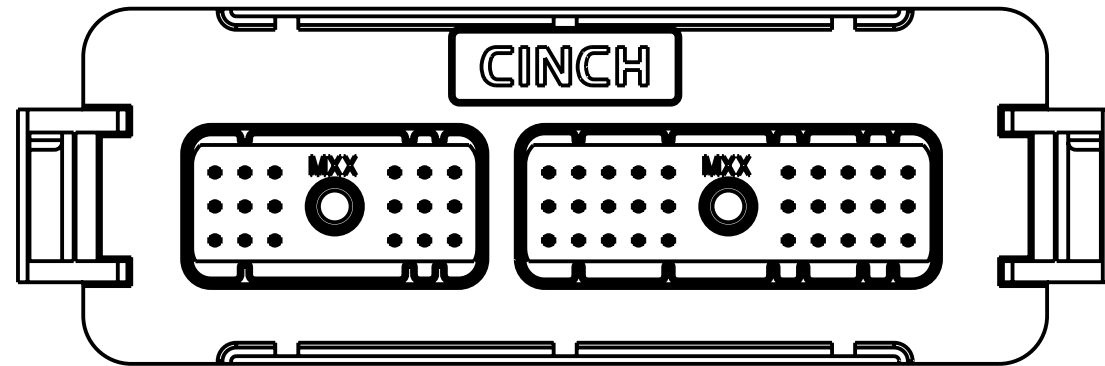
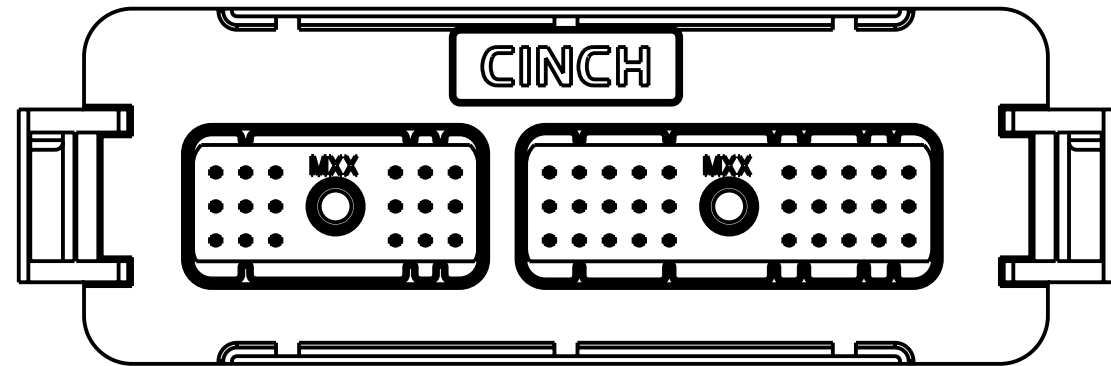
# CINCH PART NUMBER MATRIX

P/N: 581 01 48 005

P/N: 581 01 48 007

48-WAY HEADER ASSEMBLY WITH OUT FERRITE FILTERS

48-WAY HEADER ASSEMBLY WITH FERRITE FILTERS



MATES WITH CINCH HARNESS CONNECTORS P/N:  
581 01 18 023 (18-WAY) AND 581 01 30 029 (30-WAY)

## DRAWING REVISIONS

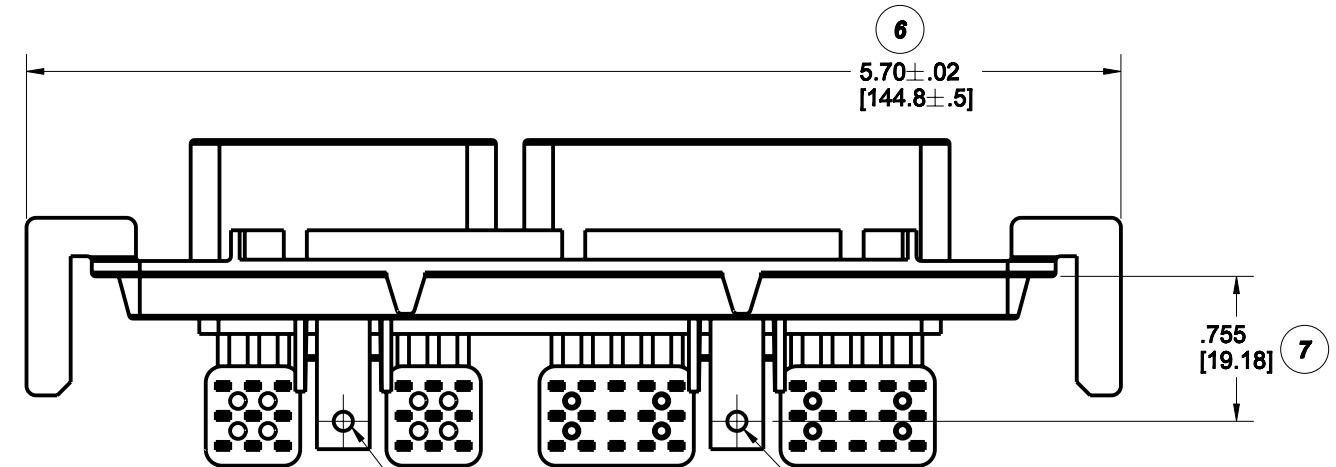
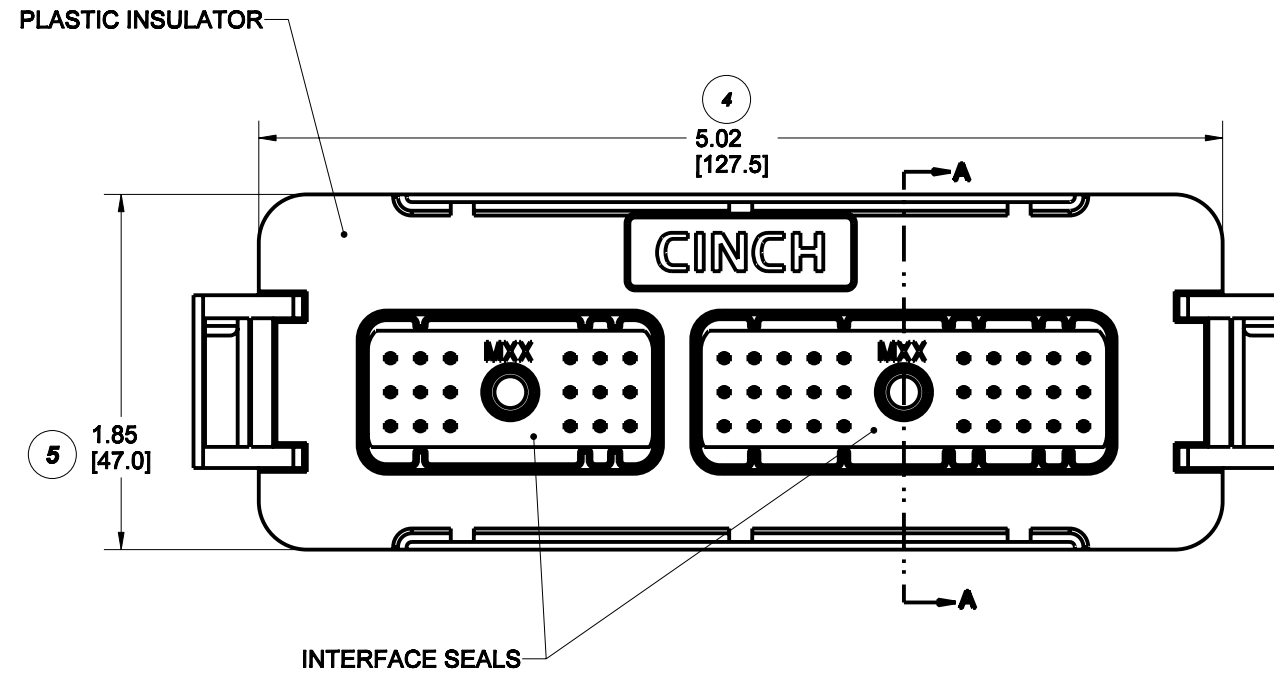
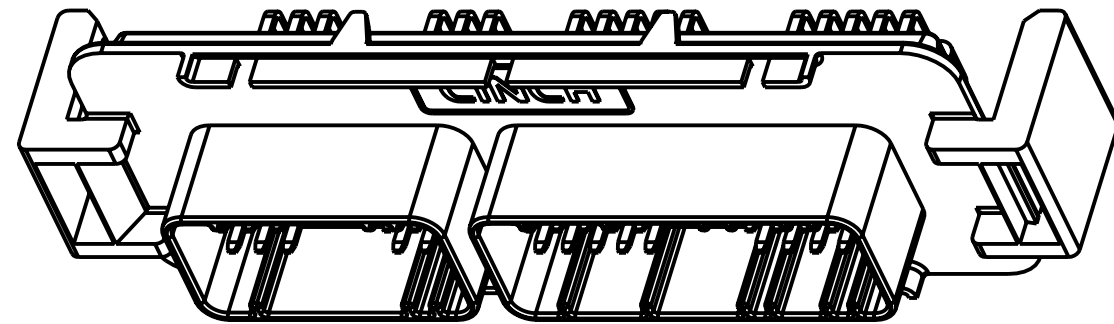
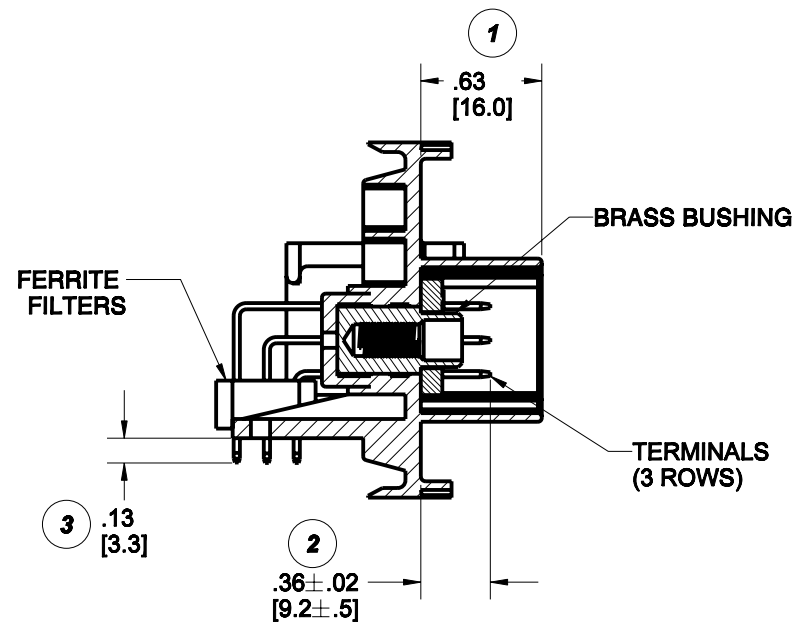
REV	DOCUMENT	APP	DATE
A	REL. FOR PRODUCTION D.O. 05-1157	A.C.	7/21/05
B	ECN: 05A468 ADDED LEGS AND ADDED SLOTS TO RIBS	A.C.	9/27/05
C	ECN: 06A635 ADDED SHEET 5 ADDED SHEET 6 MODIFIED SHEET 3 MODIFIED SHEET 4	A.C.	3/24/06
D	ECN: 06A408 REFORMATTED DRAWING PCB LAYOUTS REDRAWN WITH ADDITIONAL KEEP OUT AREAS	A.C.	9/28/06

### NOTES:

- ALL DIMENSIONS ARE IN INCHES;  
DIMENSION 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 OR WAVE SOLDERING PROCESS, ROHS COMPLIANT.
- MATES WITH CINCH SHS PUSH-TO-SEAT HARNESS CONNECTORS (SEE TABLE ABOVE).
- THERMALLY CONDUCTIVE ADHESIVE PASTE SOLD SEPARATLY: RECOMMENDED IS LOCTITE 383.
- MOSFET SPRING PLATES ARE SOLD SEPARATLY (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: 72 PARTS/CARTON BOX.

RoHS COMPLIANT

UNITS	ENGLISH	INCHES	PRO/E	Cinch		MODELED BY:
DO NOT SCALE DRAWING	UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		DRAWN BY <b>B. KOSTIC</b>	DATE <b>09/03/04</b>	TITLE <b>48-WAY HEADERS MODICE SE</b>	
FILLET/RADIUS .02 MAX	TOLERANCES X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5°		DESIGN ENGINEER <b>B. KOSTIC</b>	DATE <b>09/03/04</b>	MATERIAL <b>SEE NOTE 2.</b>	
THIS DOCUMENT IS THE PROPERTY OF CINCH. NEITHER THIS DOCUMENT NOR ANY OF THE INFORMATION CONTAINED IN IT MAY BE DUPLICATED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF CINCH.			DESIGN ENGINEERING MGR. <b>A. CAINES</b>	DATE <b>11/18/04</b>	MATERIAL SPEC NUMBER	CONTROL SPEC NUMBER <b>A 14562</b>
			MFG. ENGINEERING <b>R. GARZA</b>	DATE <b>11/18/04</b>	CAD FILE NUMBER 5810148005S	DRAWING NUMBER <b>581 01 48 005 S</b>
			QUALITY ASSURANCE <b>R. QUIROZ</b>	DATE <b>11/18/04</b>	CAGE IDENT NO. <b>71785</b>	SIZE <b>B</b>
					SCALE <b>1:1</b>	SHEET 1 OF 6



FOR PCB MOUNTING #4 SELF-TAPPING SCREW IS RECOMMENDED TORQUE: 2-3 IN\*LB. [0.23-0.34 Nm]

CINCH P/N: 581 01 48 007 SHOWN  
(HEADER WITH FILTERS)

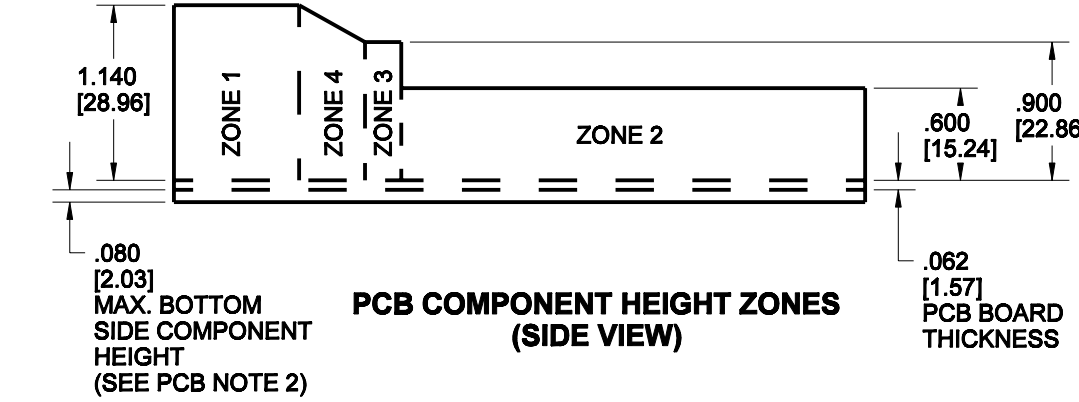
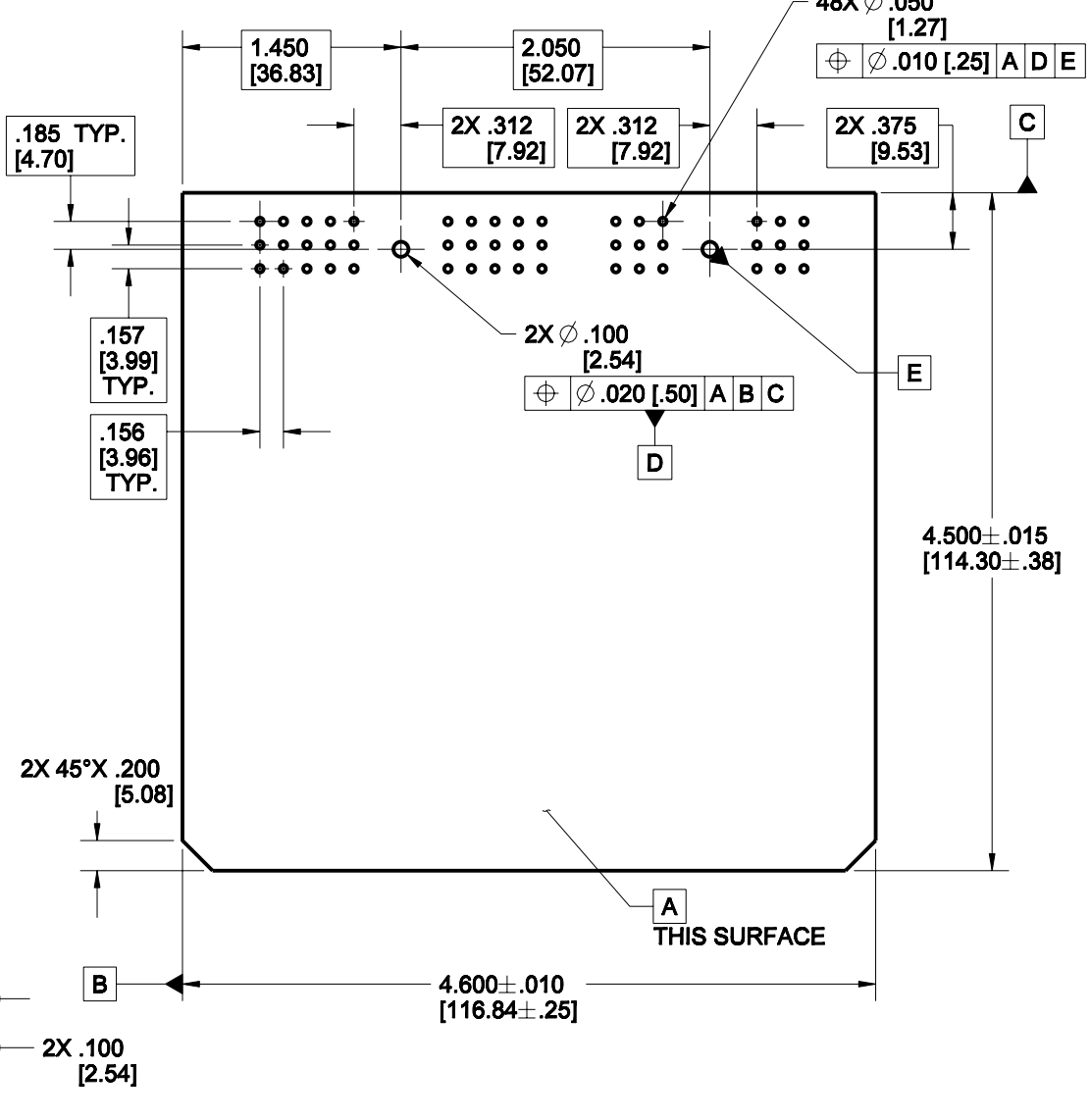
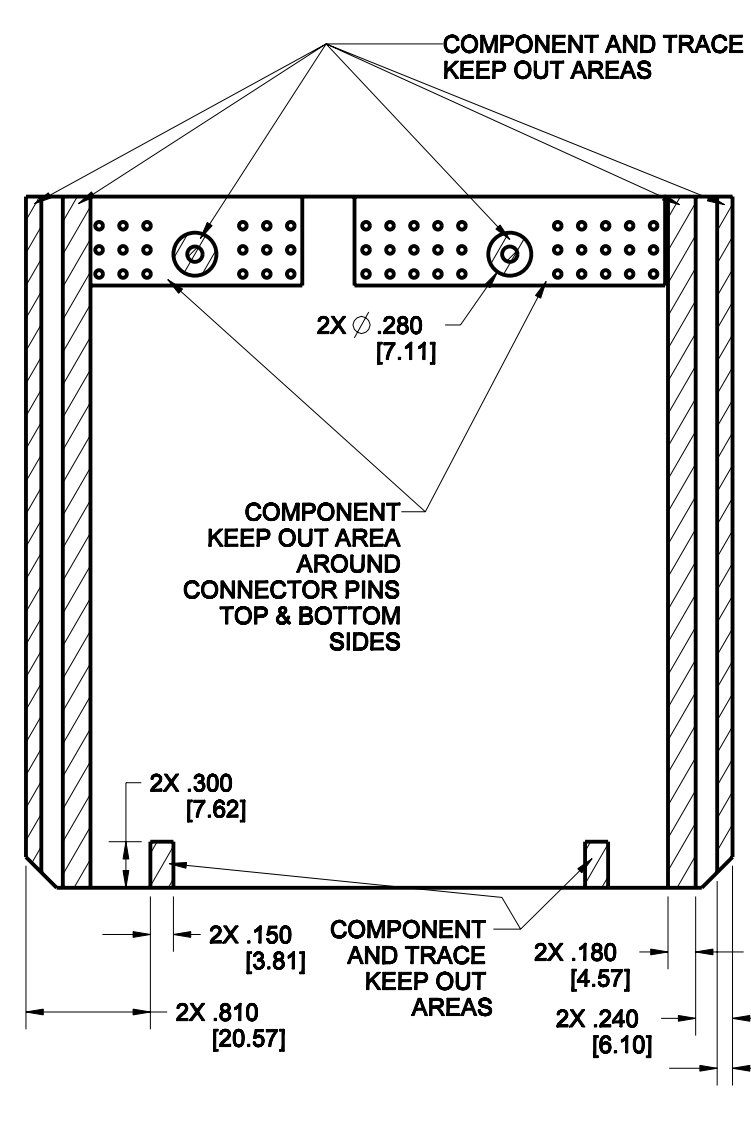
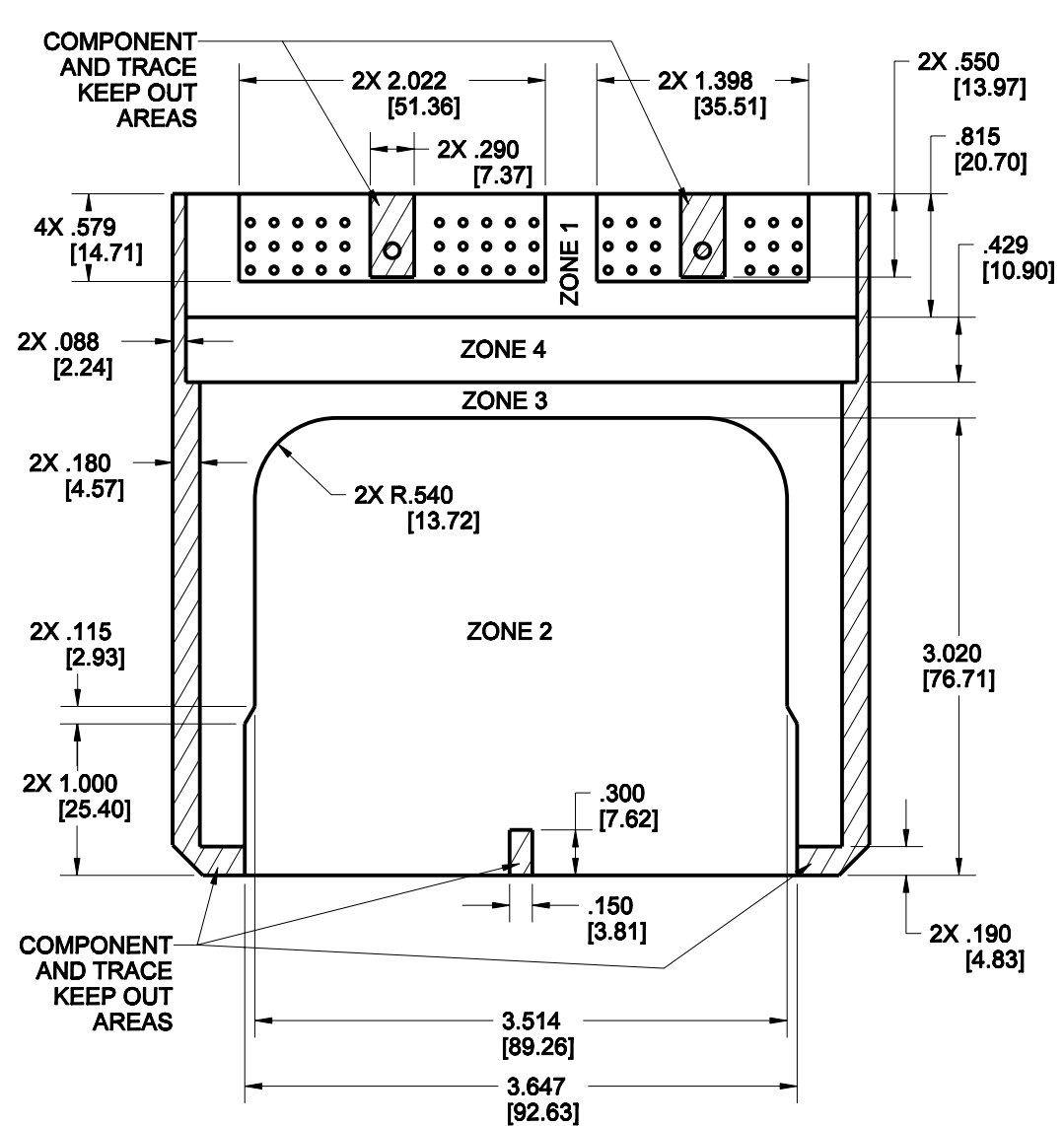
UNITS <b>ENGLISH</b>	<b>Cinch</b>		1700 FINLEY RD. LOMBARD, IL. 60148
DO NOT SCALE DRAWING	TITLE 48-WAY HEADERS MODICE SE		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES	PRO/E DRAWING		
FILLET/RADIUS .02 MAX	TOLERANCES X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5°	CAD FILE NUMBER 5810148005S	DRAWING NUMBER <b>581 01 48 005 S</b>
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH	THIS DOCUMENT IS THE PROPERTY OF CINCH. NEITHER THIS DOCUMENT NOR ANY OF THE INFORMATION CONTAINED IN IT MAY BE DUPLICATED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF CINCH.	CAGE IDENT NO. <b>71785</b>	SIZE <b>B</b>
		SCALE 1:1	REV <b>D</b>
		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
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.140"	.600"	.900"	SEE PCB NOTE 3

**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.

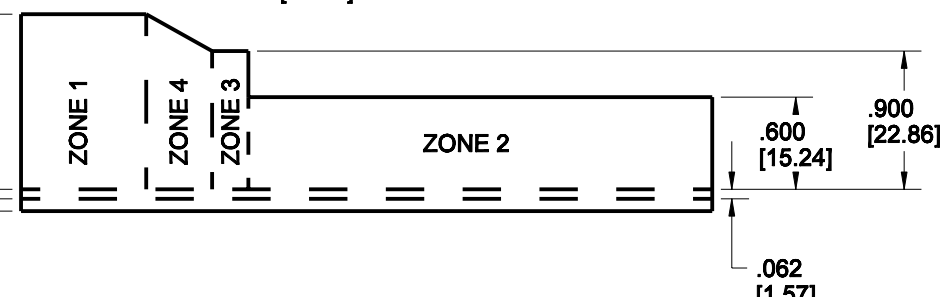
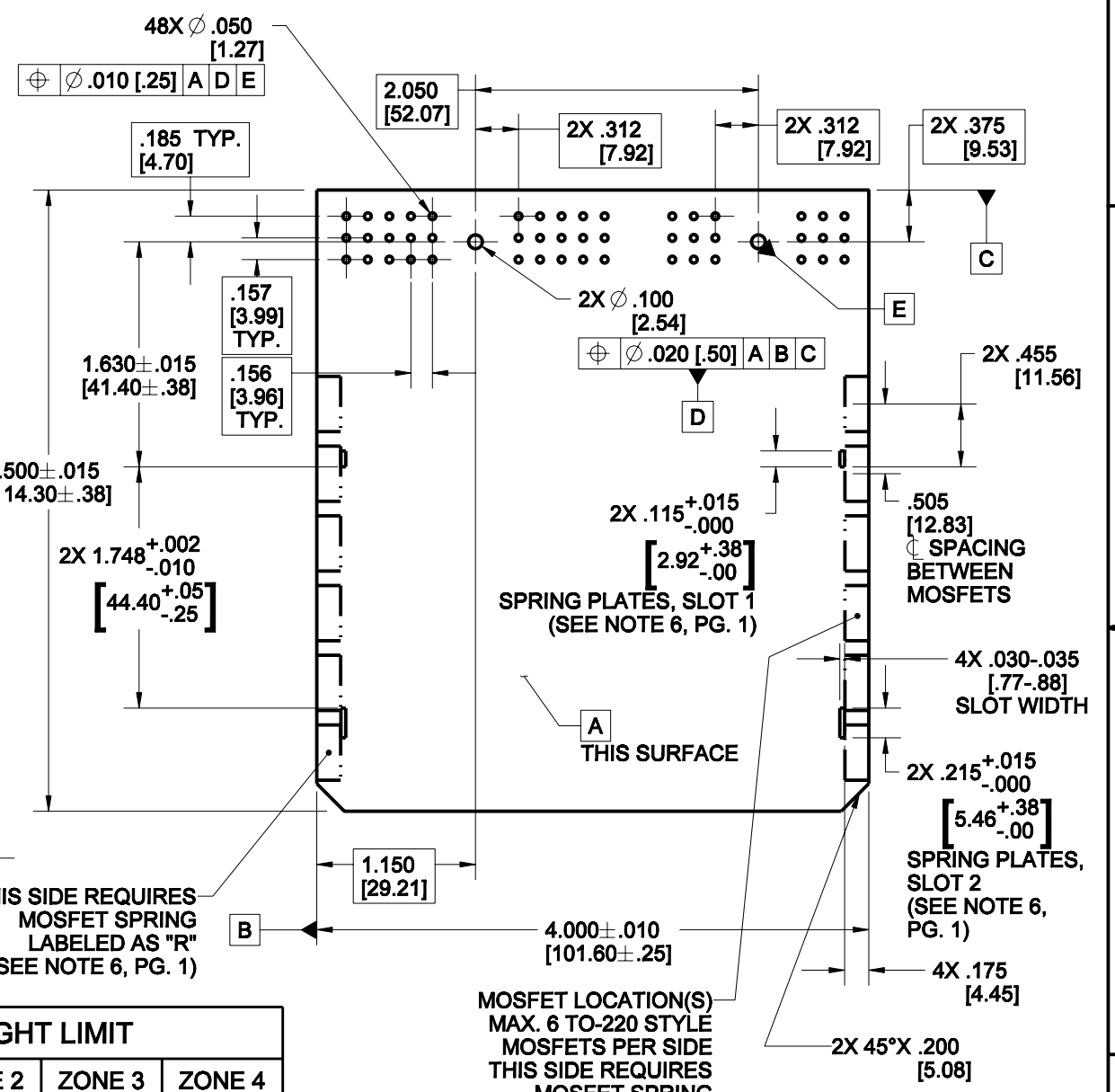
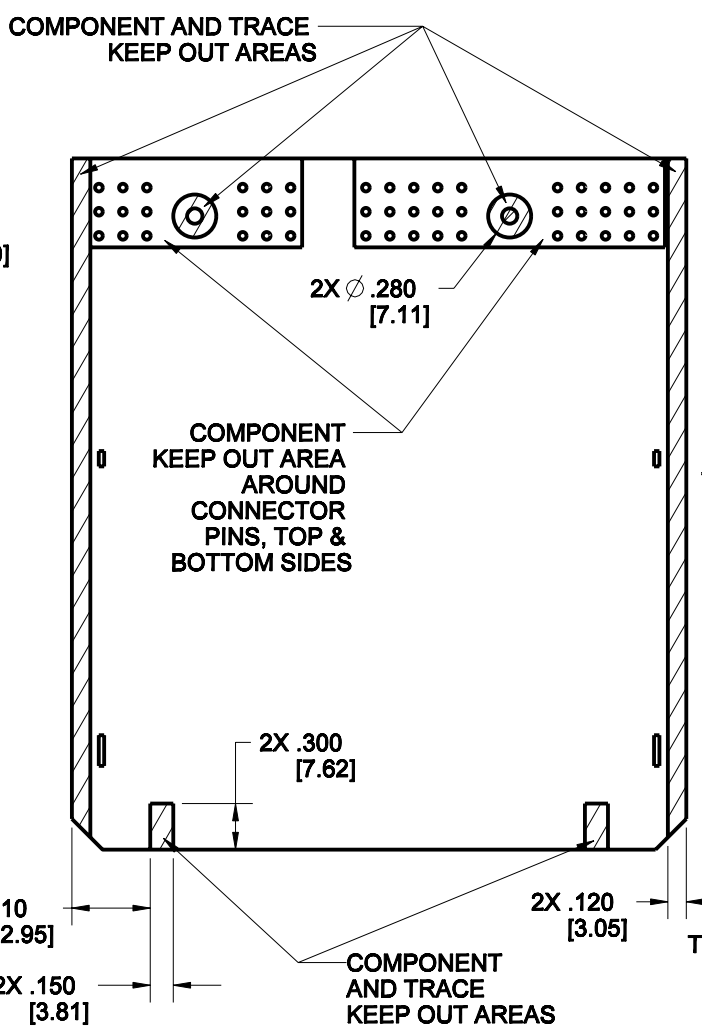
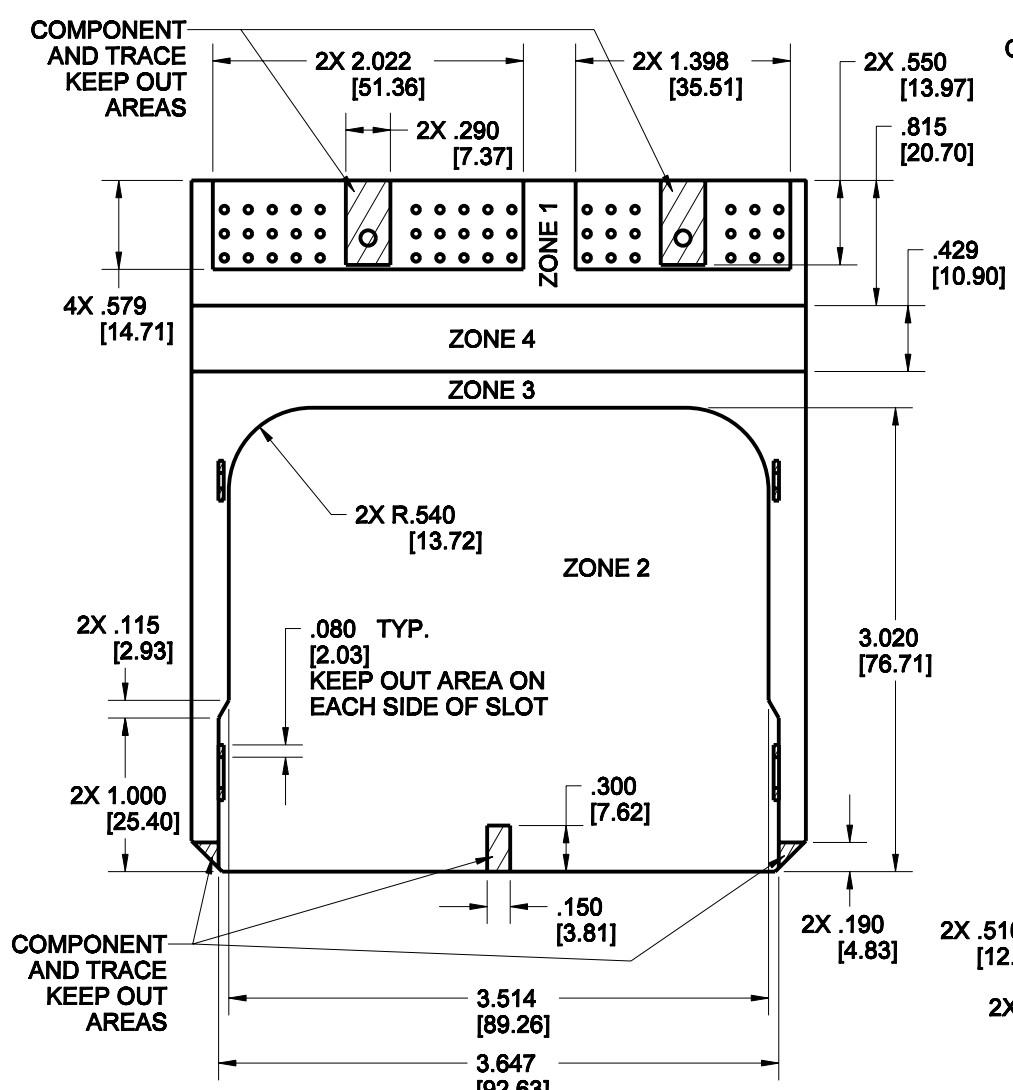
UNITS <b>ENGLISH</b>	<b>Cinch</b> 1700 FINLEY RD. LOMBARD, IL. 60148	
DO NOT SCALE DRAWING		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES	TITLE <b>48-WAY HEADERS MODICE SE</b>	
FILLET/RADI .02 MAX	DRAWING NUMBER <b>581 01 48 005 S</b>	
TOLERANCES .X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5°	REV <b>D</b>	
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH	CAD FILE NUMBER <b>5810148005S</b>	SCALE <b>4:5</b>
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	SHEET 3 OF 6	

# PCB LAYOUT 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
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.140"	.600"	.900"	SEE PCB NOTE 4

- 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.

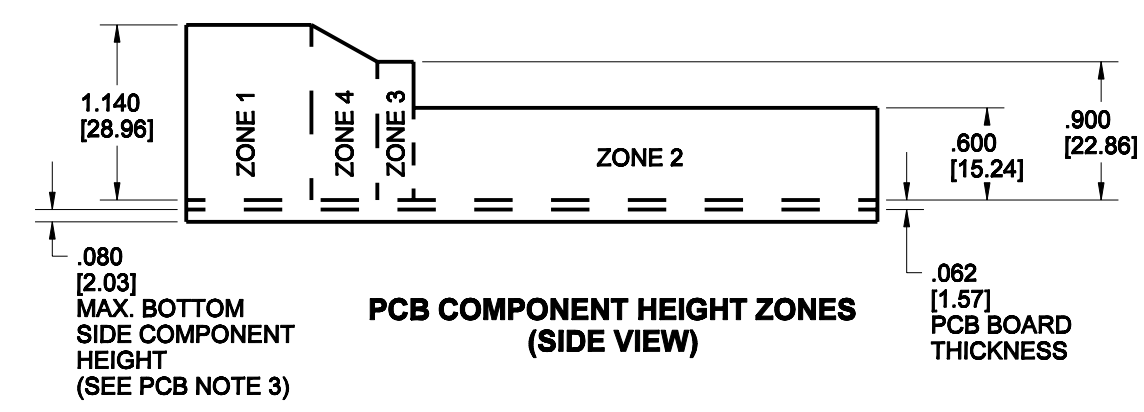
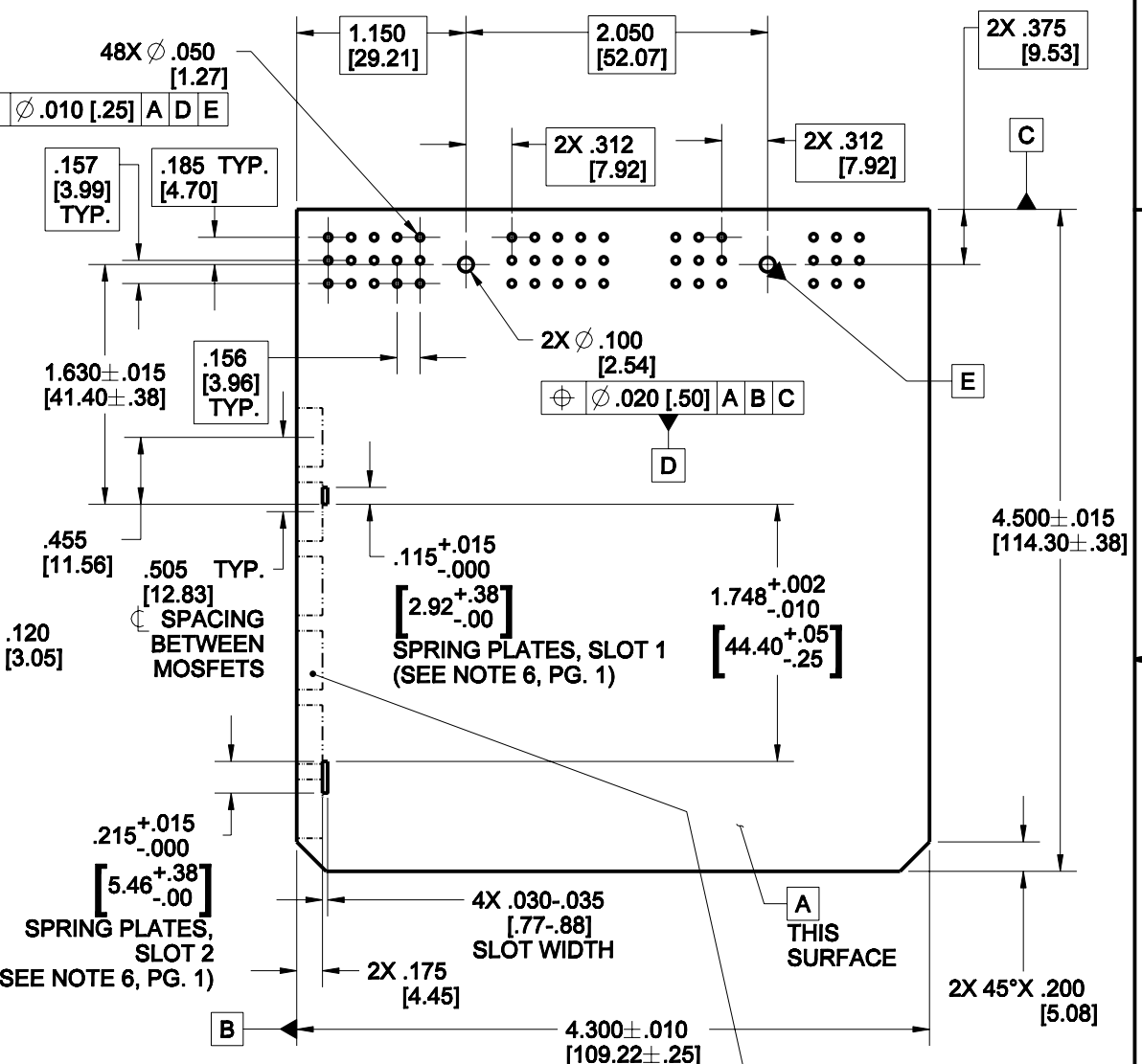
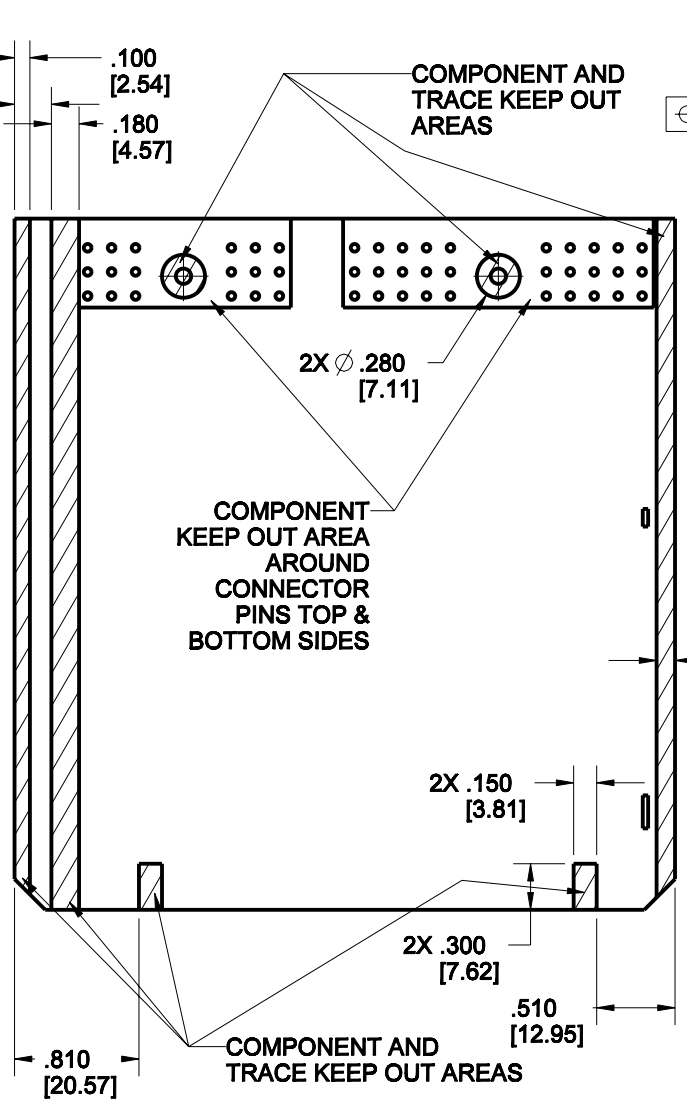
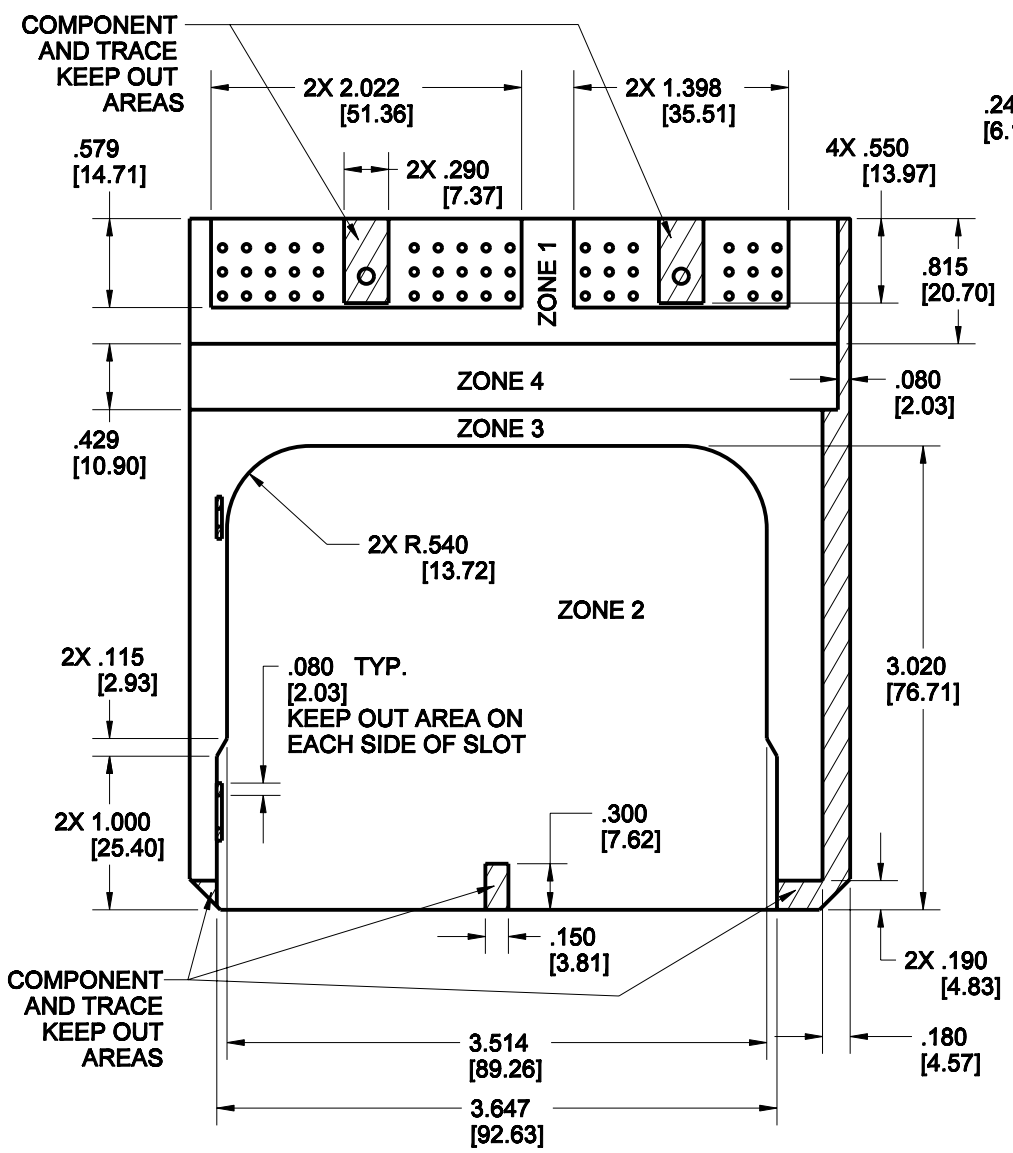
UNITS	ENGLISH	<b>Cinch</b>		1700 FINLEY RD. LOMBARD, IL. 60148
DO NOT SCALE DRAWING		TITLE 48-WAY HEADERS MODICE SE		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		PRO/E DRAWING		
FILLETRADI .02 MAX.	TOLERANCES .X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5°	CAD FILE NUMBER 5810148005S	DRAWING NUMBER <b>581 01 48 005 S</b>	REV D
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH	THIS DOCUMENT IS THE PROPERTY OF CINCH. NEITHER THIS DOCUMENT NOR ANY OF THE INFORMATION CONTAINED IN IT MAY BE DUPLICATED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF CINCH.	CAGE IDENT NO. <b>71785</b>	SIZE <b>B</b>	SCALE 4:5
		SHEET 4 OF 6		

# PCB LAYOUT 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
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.140"	.600"	.900"	SEE PCB NOTE 4

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	ENGLISH			1700 FINLEY RD. LOMBARD, IL. 60148
DO NOT SCALE DRAWING				TITLE
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES			48-WAY HEADERS MODICE SE	
FILLET/RADIUS .02 MAX	TOLERANCES X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5°		PRO/E DRAWING	
THIS DOCUMENT IS THE PROPERTY OF CINCH. NEITHER THIS DOCUMENT NOR ANY OF THE INFORMATION CONTAINED IN IT MAY BE DUPLICATED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF CINCH.			CAD FILE NUMBER 5810148005S	DRAWING NUMBER <b>581 01 48 005 S</b>
CAGE IDENT NO. <b>71785</b>	SIZE <b>B</b>	SCALE 4:5	REV <b>D</b>	
			SHEET 5 OF 6	

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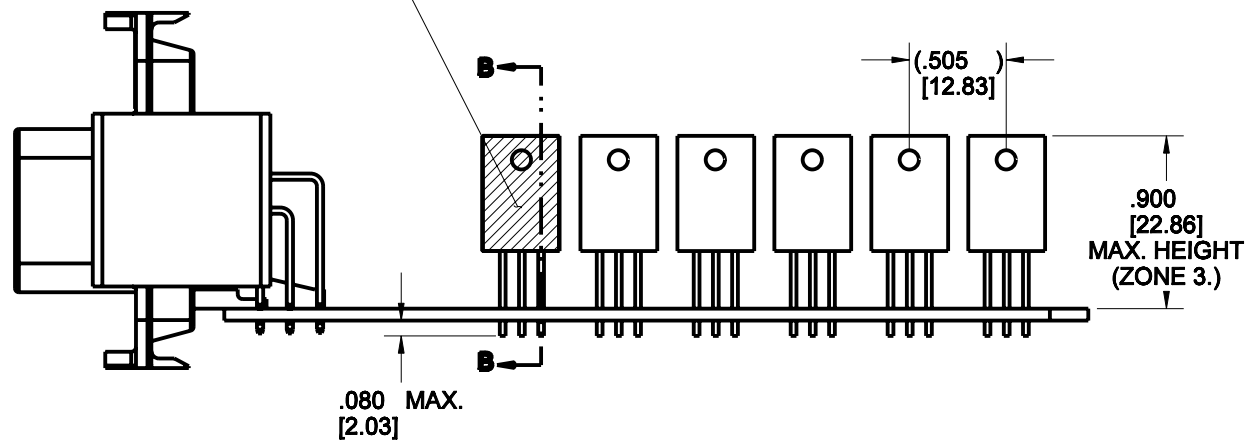
C

B

B

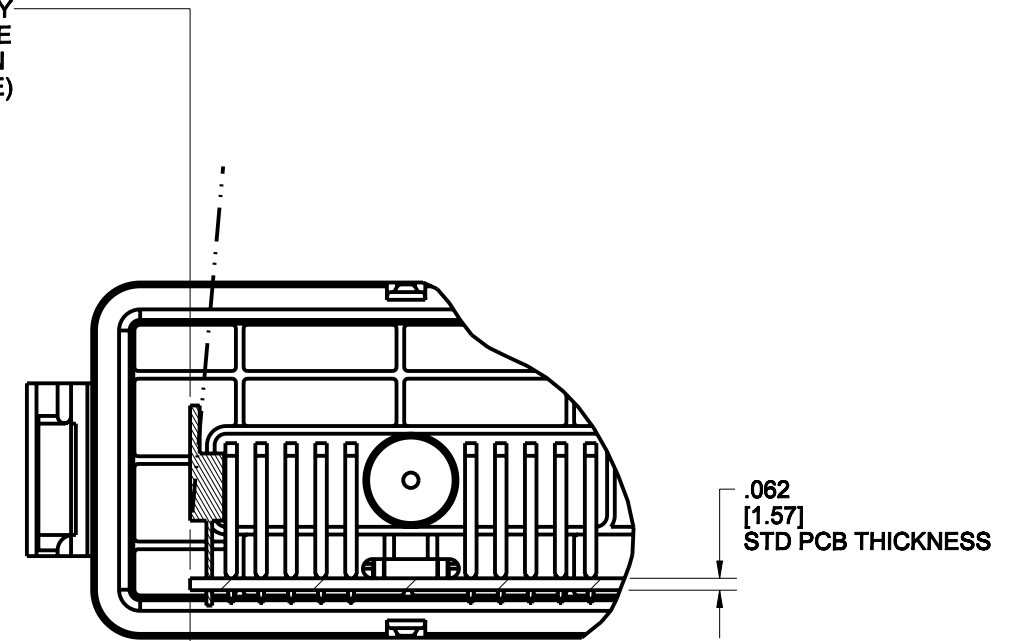
A

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



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

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



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

**REQUIRES TO-220 PACKAGING PROFILE  
PARTIAL SECTION B-B**

UNITS <b>ENGLISH</b>	<b>Cinch</b>		1700 FINLEY RD LOMBARD, IL. 60148
DO NOT SCALE DRAWING	TITLE <b>48-WAY HEADERS MODICE SE</b>		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES	DRAWING NUMBER <b>581 01 48 005 S</b>		
FILLET/RADI .02 MAX	TOLERANCES X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5°	CAD FILE NUMBER 5810148005S	REV <b>D</b>
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH	CAGE IDENT NO. <b>71785</b>	SIZE <b>B</b>	SCALE 1:1
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5

4

1