

8 7 6 5 4 3 2 1

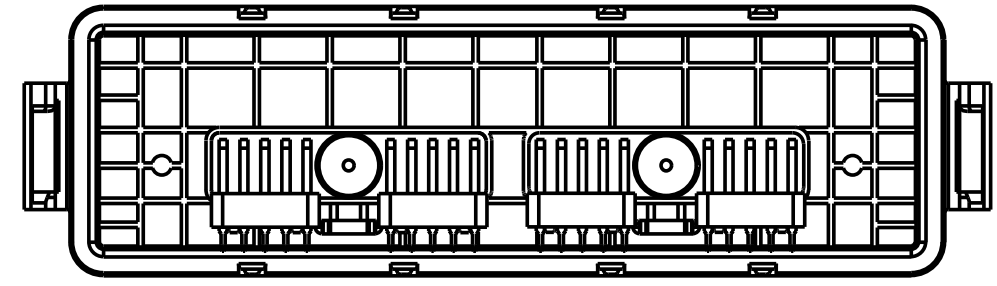
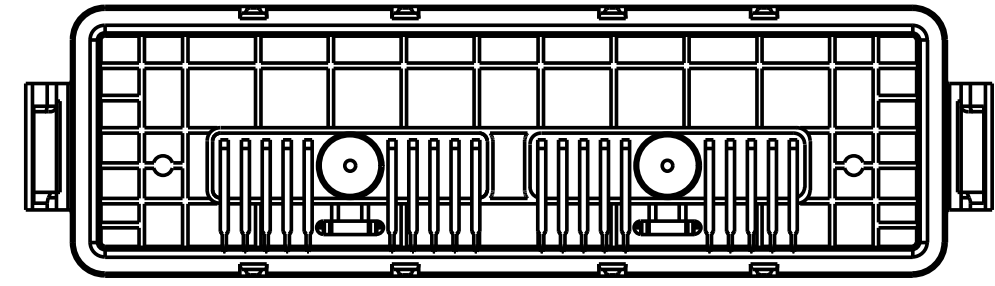
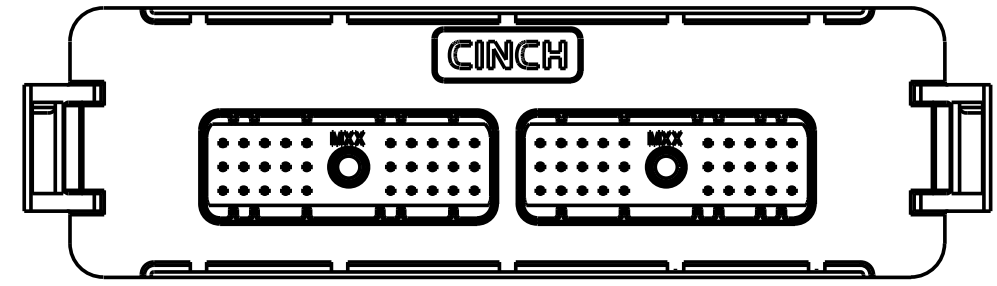
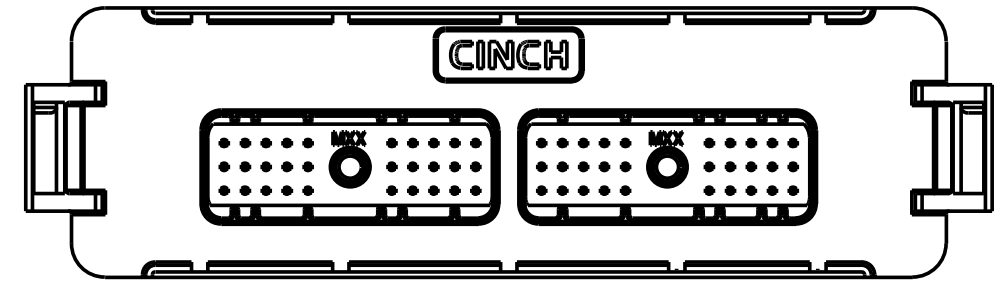
CINCH PART NUMBER MATRIX

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



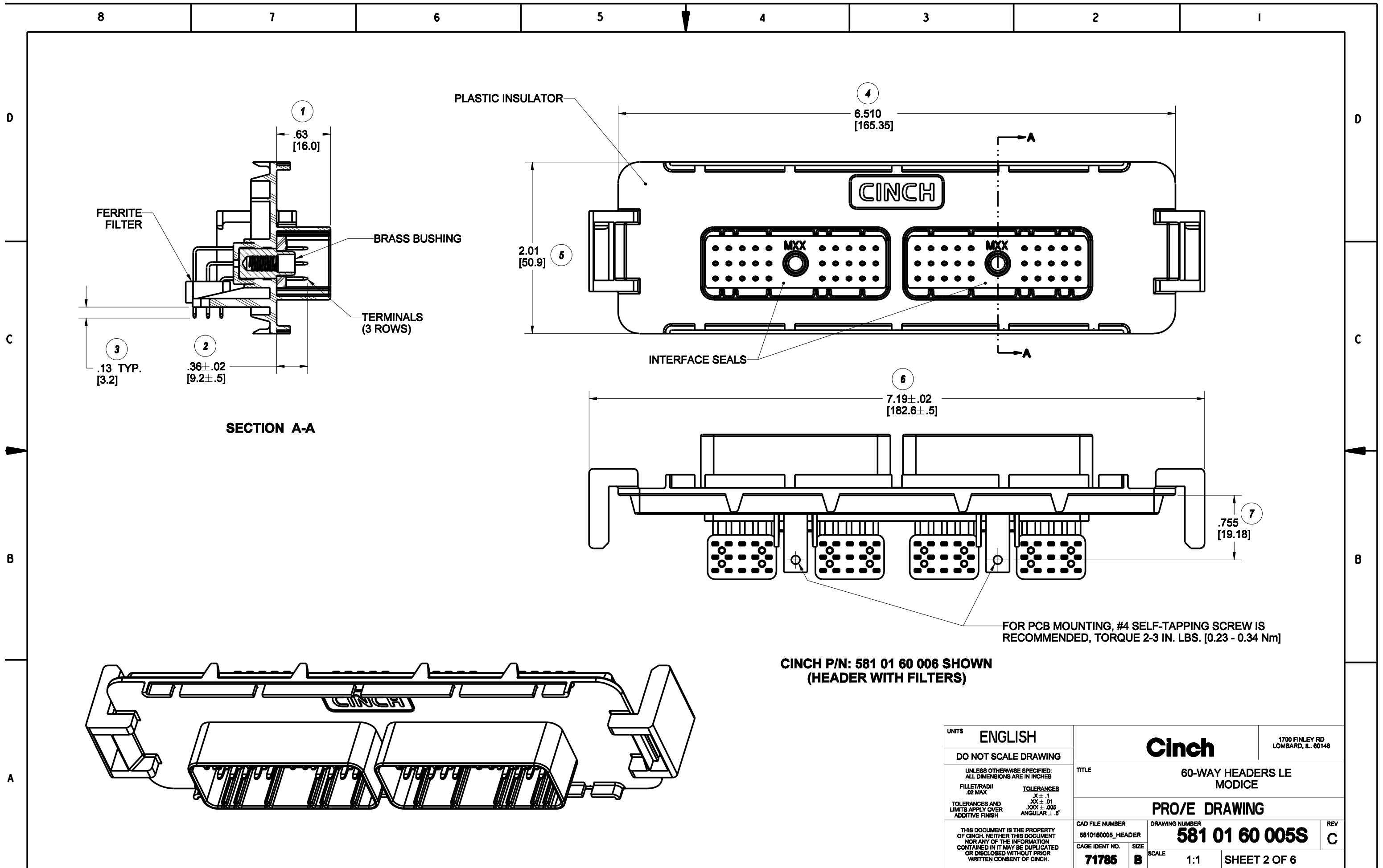
MATES WITH CINCH HARNESS CONNECTORS P/N:
581 01 30 028 (30-WAY) AND 581 01 30 029 (30-WAY)

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		DATE		1700 FINLEY RD. LOMBARD, IL. 60148	
DRAWN BY		DATE		TITLE	
B. KOSTIC		9/02/05		60-WAY HEADERS LE MODICE	
DESIGN ENGINEER		DATE		MATERIAL	
B. KOSTIC		9/02/05		CONTROL SPEC NUMBER	
DESIGN ENGINEERING MGR.		DATE		MATERIAL SPEC NUMBER	
A. CAINES		9/5/05		FINISH	
MFG. ENGINEERING		DATE		PROJECT NUMBER	
R. GARZA		9/15/05		A 14562	
QUALITY ASSURANCE		DATE		CAD FILE NUMBER	
D. DE LA PENNA		9/15/05		5810160005_HEADER	
DRAWING NUMBER		SCALE		SIZE	
581 01 60 005S		7:10		B	
SHEET 1 OF 6					



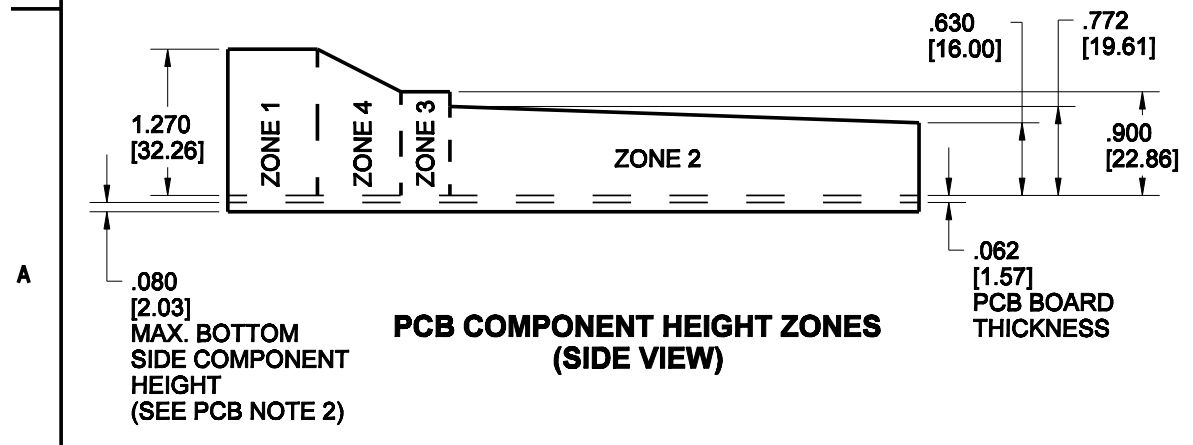
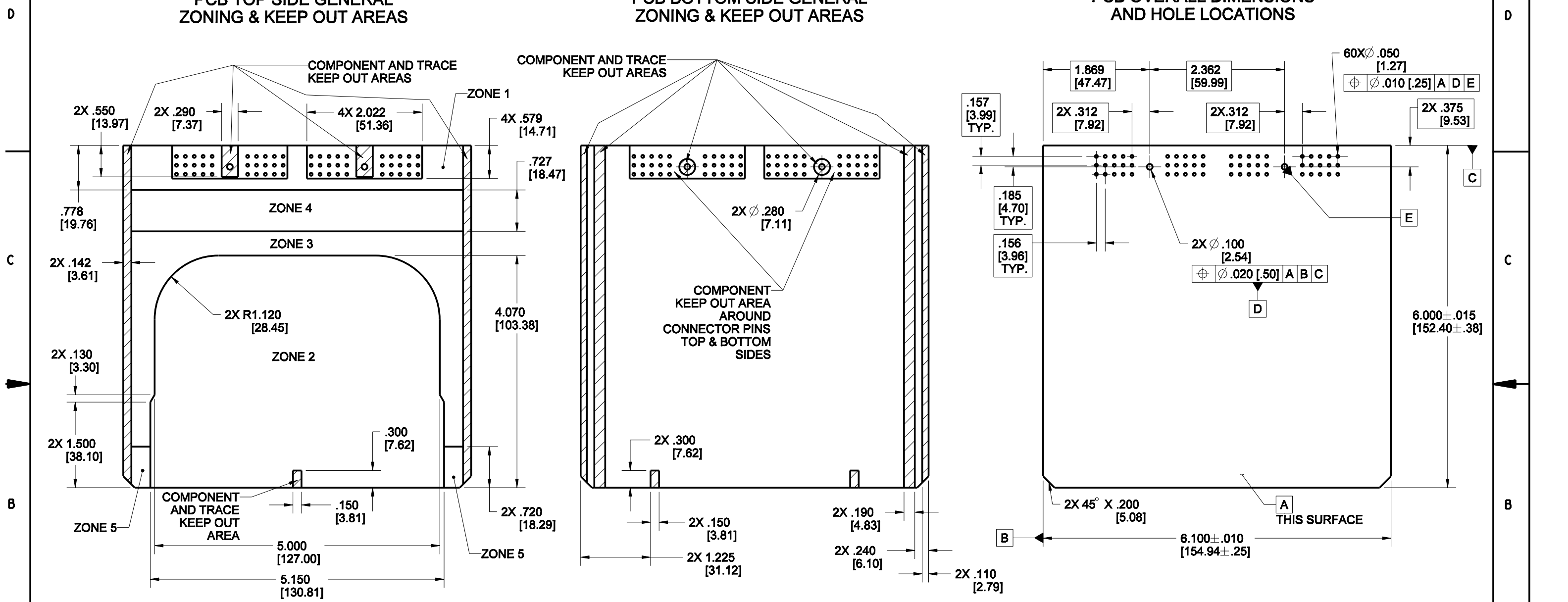
UNITS ENGLISH		Cinch		1700 FINLEY RD LOMBARD, IL 60148
DO NOT SCALE DRAWING		TITLE 60-WAY HEADERS LE MODICE		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		PRO/E DRAWING		
FILLET/RADI .02 MAX	TOLERANCES X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5	CAD FILE NUMBER 5810160006_HEADER	DRAWING NUMBER 581 01 60 005S	REV C
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. 71785	SCALE B	1:1
		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:					
1. ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB. 2. THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 6 SIDE VIEW). 3. AREA HAS VARIABLE HEIGHT. SEE PCB COMPONENT HEIGHT ZONES VIEW FOR DETAILS.					

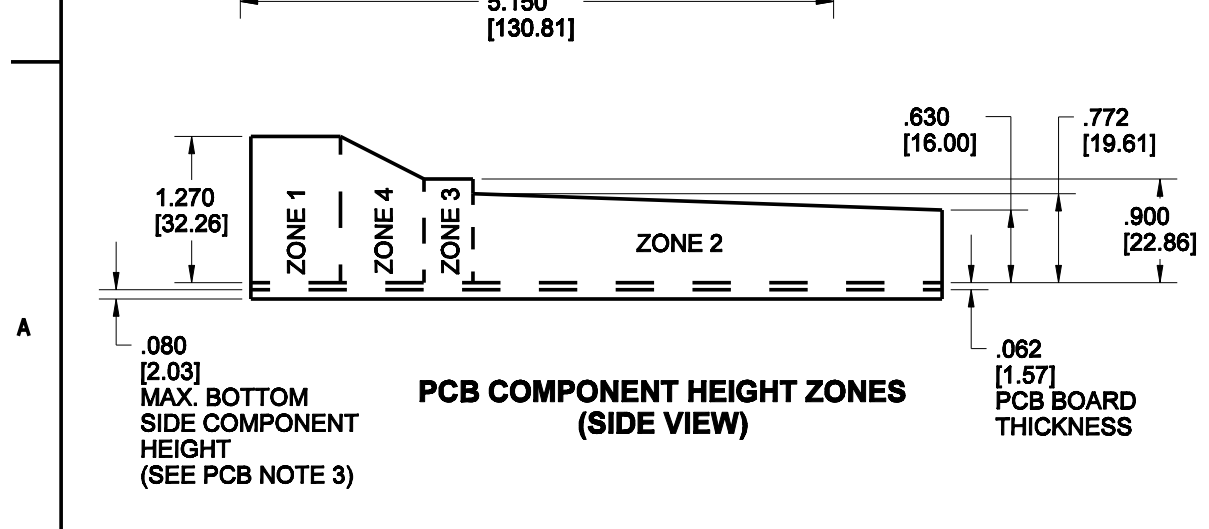
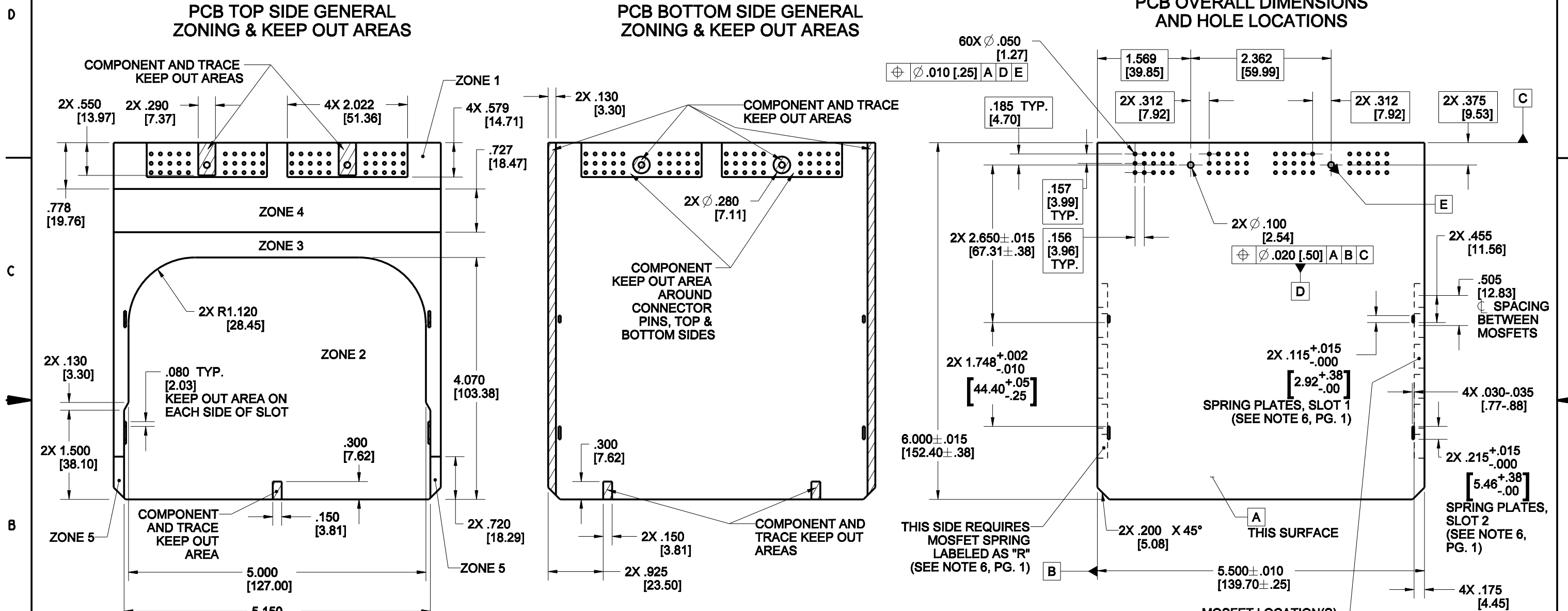
UNITS	ENGLISH	Cinch	1700 FINLEY RD LOMBARD, IL 60148
DO NOT SCALE DRAWING		60-WAY HEADERS LE MODICE	
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		PRO/E DRAWING	
FILLET/RADI .02 MAX	TOLERANCES X ± .1 .XX ± .01 .00X ± .005 ANGULAR ± .5	THIS DOCUMENT IS THE PROPERTY OF CINCH. NEITHER THIS DOCUMENT NOR ANY OF THE INFORMATION CONTAINED IN IT MAY BE DUPLICATED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF CINCH.	CAGE IDENT NO. 71785 SIZE B SCALE 3:5 SHEET 3 OF 6
TITLE	581 01 60 005S		REV C

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)

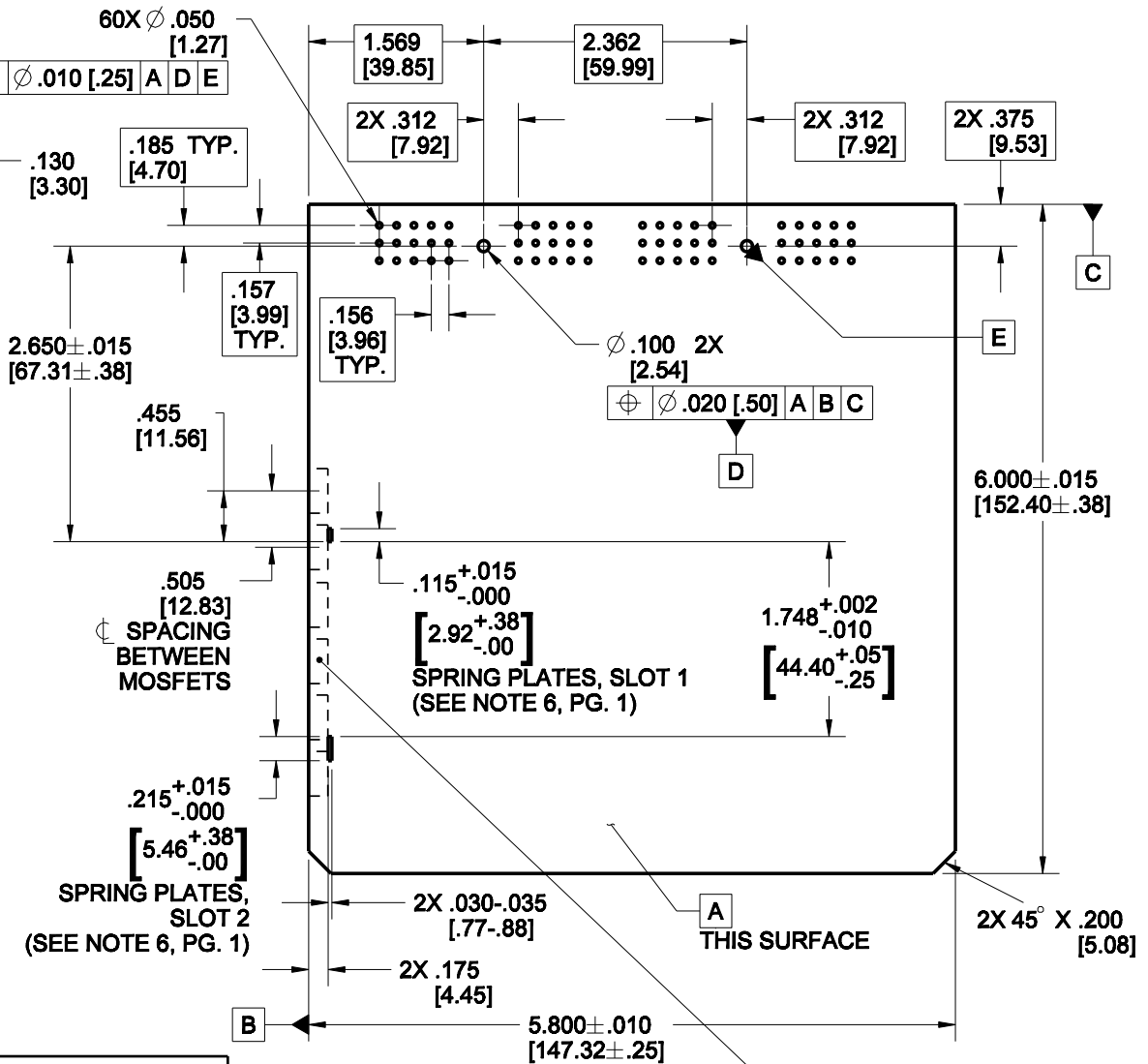
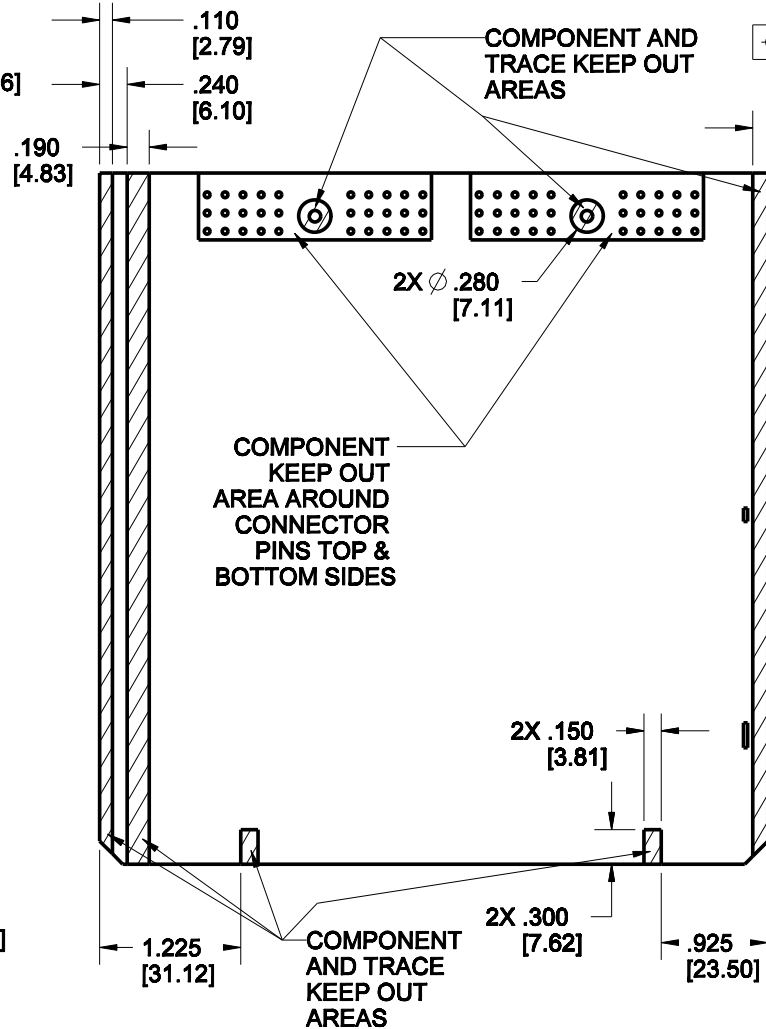
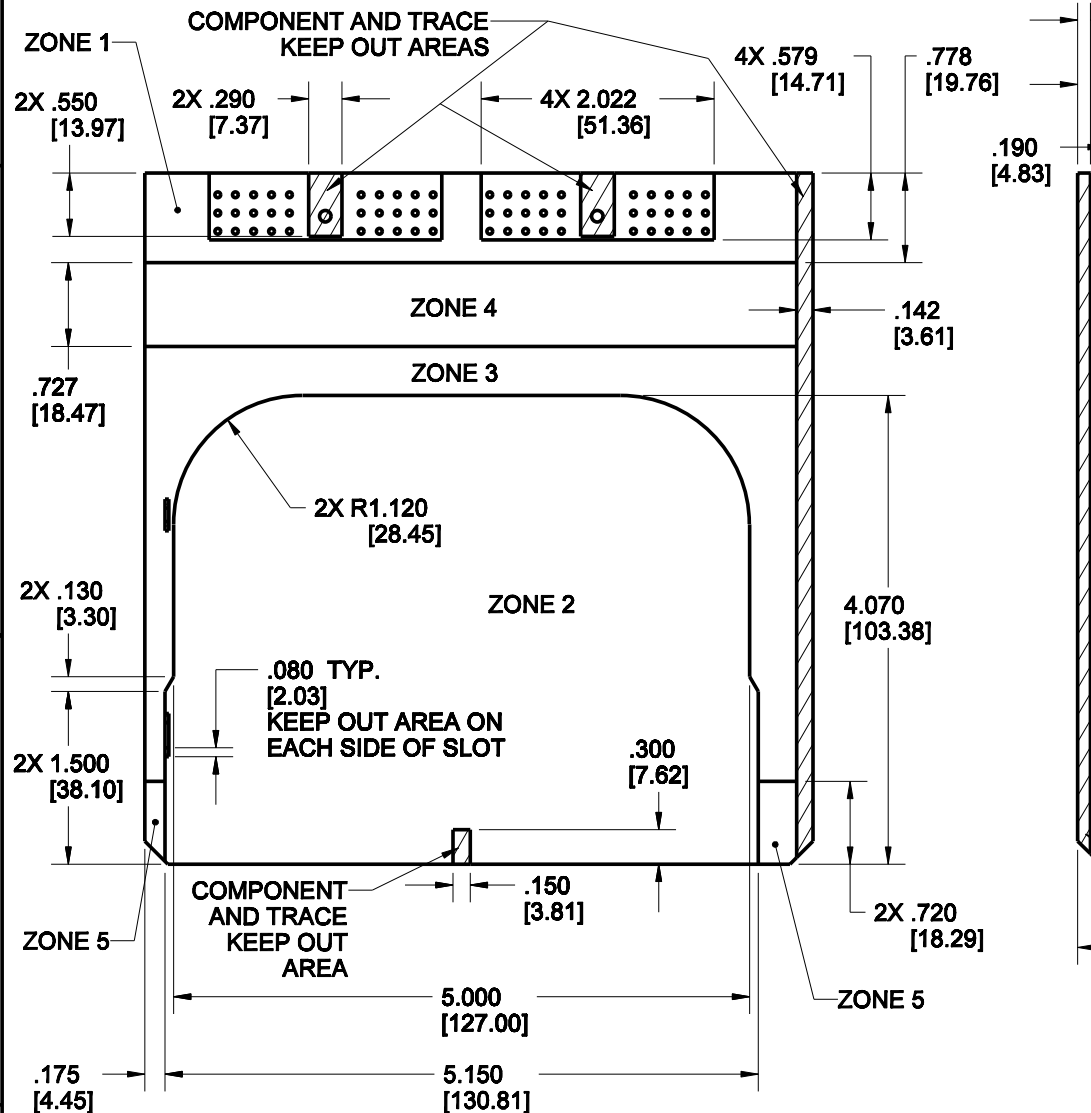
UNITS	ENGLISH		 1700 FINLEY RD LOMBARD, IL 60148
DO NOT SCALE DRAWING			
<small>UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES</small>			TITLE
<small>FILLET/RADI .02 MAX</small>			60-WAY HEADERS LE MODICE
<small>TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH</small>			PRO/E DRAWING
<small>THIS 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.</small>			CAD FILE NUMBER 5810160005_HEADER
			DRAWING NUMBER 581 01 60 005S
			CAGE IDENT NO. 71785
			REV C
			SCALE 3:5
			SHEET 4 OF 6

PCB LAY-OUT WITH ONE HEAT SINK

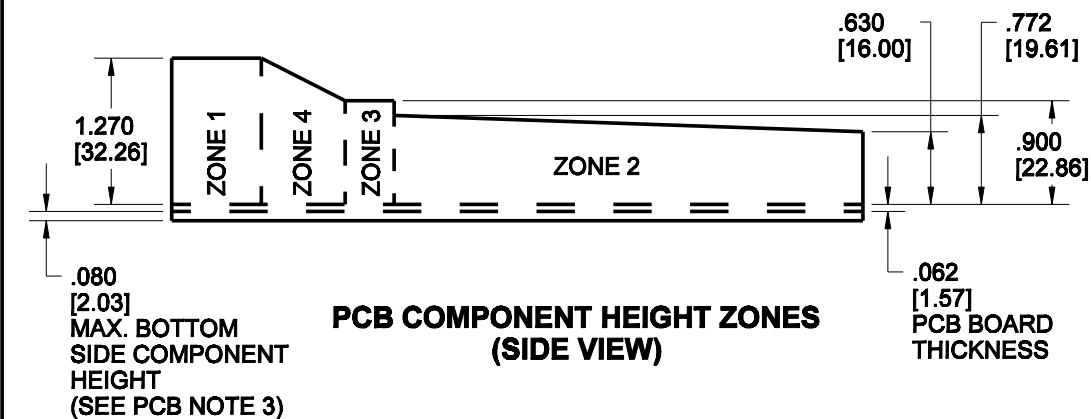
PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS

PCB OVERALL DIMENSIONS AND HOLE LOCATIONS



PCB COMPONENT HEIGHT ZONES (SIDE VIEW)



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	ENGLISH		Cinch		1700 FINLEY RD LOMBARD, IL 60148
DO NOT SCALE DRAWING			TITLE		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES			60-WAY HEADERS LE MODICE		
FILLET/RADI .02 MAX			TOLERANCES X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5		
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH			PRO/E DRAWING		
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CAGE IDENT NO. 71785	SIZE B	SCALE 3:5	SHEET 5 OF 6		

8

7

6

5

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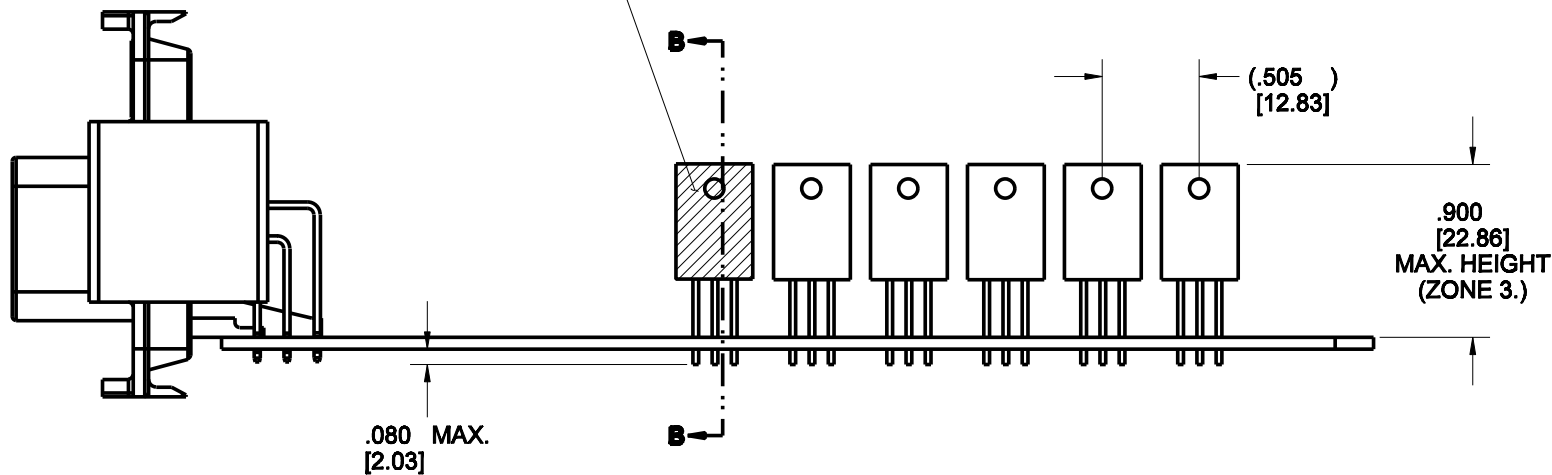
3

2

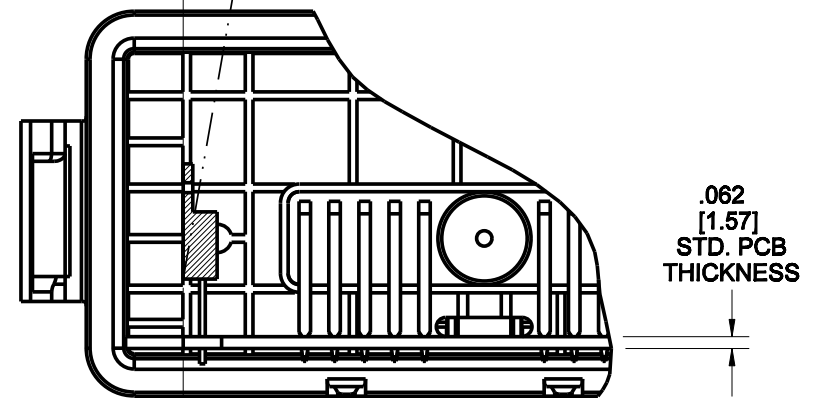
1

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**



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

SECTION B-B

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