

8

7

6

5

4

3

2

1

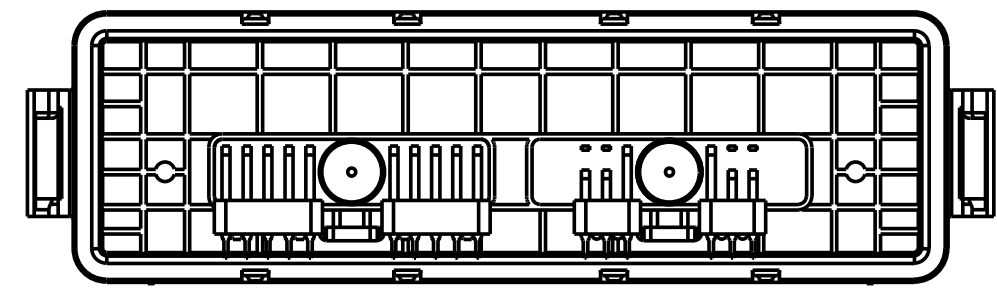
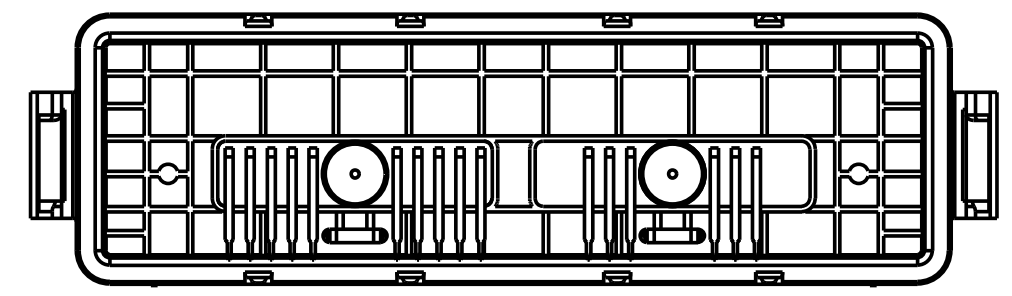
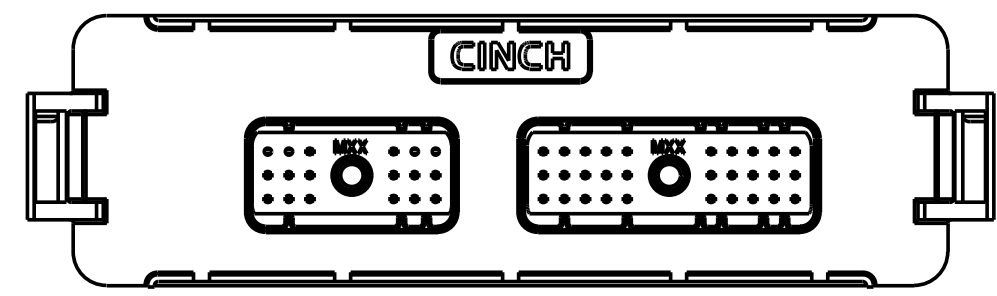
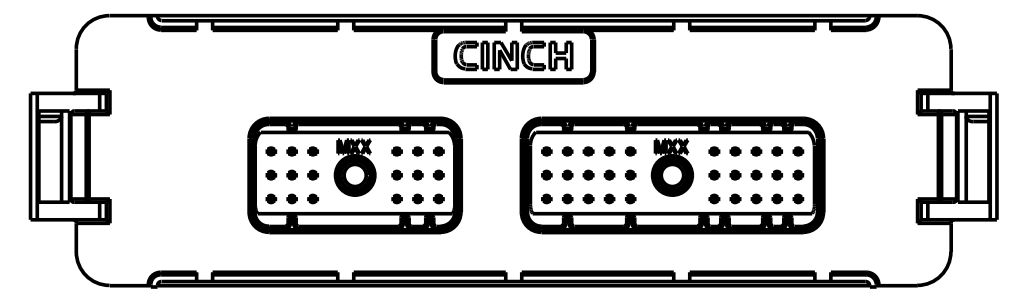
CINCH PART NUMBER MATRIX

P/N: 581 01 48 006

P/N: 581 01 48 008

48-WAY HEADER ASSEMBLY WITHOUT 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	D.O. 05-1217 REL. FOR PRODUCTION	A.C.	9/9/05
B	ECN: 06A069 ADDED SHEET 5 ADDED SHEET 6 MODIFIED SHEET 3 MODIFIED SHEET 4	A.C.	3/23/06
C	ECN: 06A478 REFORMATTED DRAWING PCB LAYOUTS REDRAWN WITH ADDITIONAL KEEP OUT AREAS	A.C.	11/07/06

NOTE:

- 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 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		ENGLISH		RoHS COMPLIANT		MODELED BY:	
DO NOT SCALE DRAWING		PRO/E		Cinch		1700 FINLEY RD. LOMBARD, IL. 60148	
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		DRAWN BY	DATE	TITLE			
FILLET/RADII .02 MAX		B. KOSTIC	9/02/05	48-WAY HEADERS LE MODICE			
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH		DESIGN ENGINEER	DATE	CONTROL SPEC NUMBER			
X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5		B. KOSTIC	9/02/05	MATERIAL		PROJECT NUMBER	
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.	DATE	MATERIAL SPEC NUMBER		FINISH	
		A. CAINES	9/9/05	5810148006_HEADER		DRAWING NUMBER	
		MFG. ENGINEERING	DATE	CAGE IDENT NO.		SCALE	
		R. GARZA	9/15/05	71785		B	
		QUALITY ASSURANCE	DATE	SIZE		SHEET 1 OF 6	
		D. DE LA PENA	9/15/05	B		1:2	

8

7

6

5

4

3

2

1

8

7

6

5

4

3

2

1

D

D

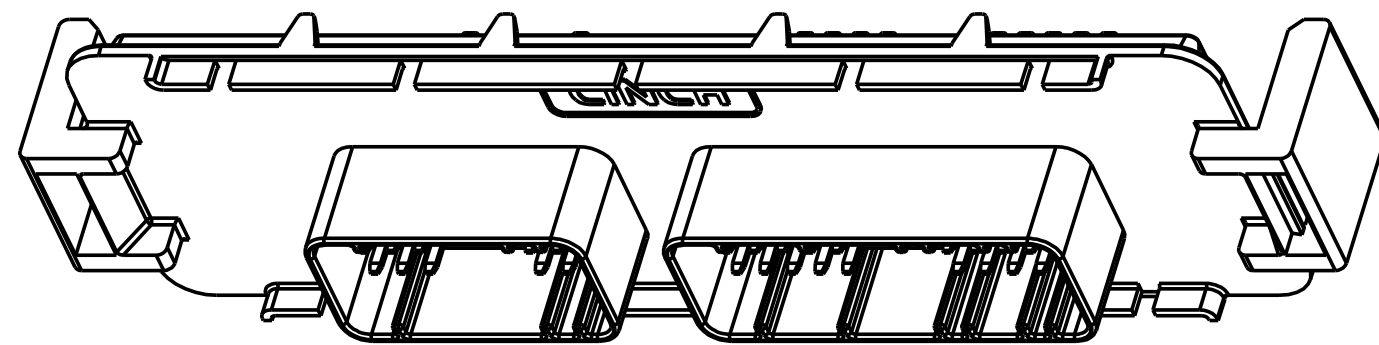
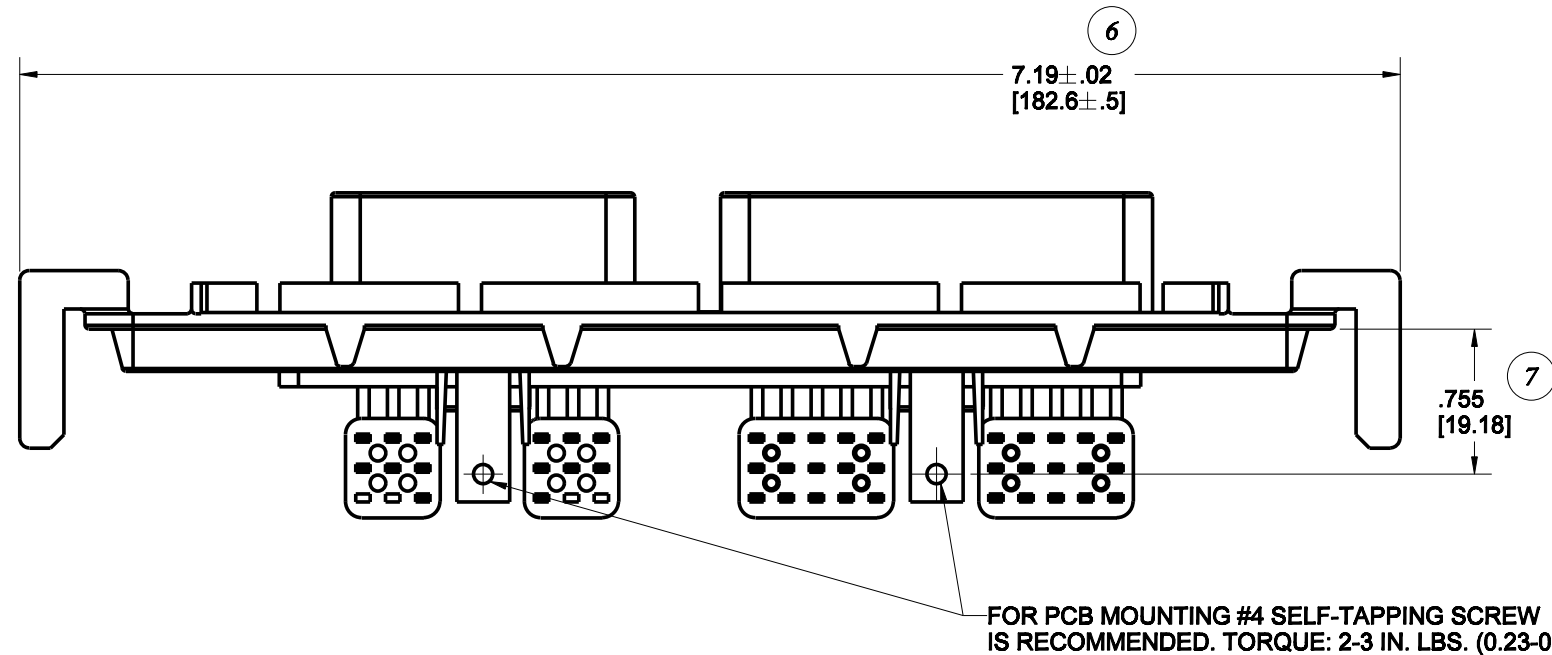
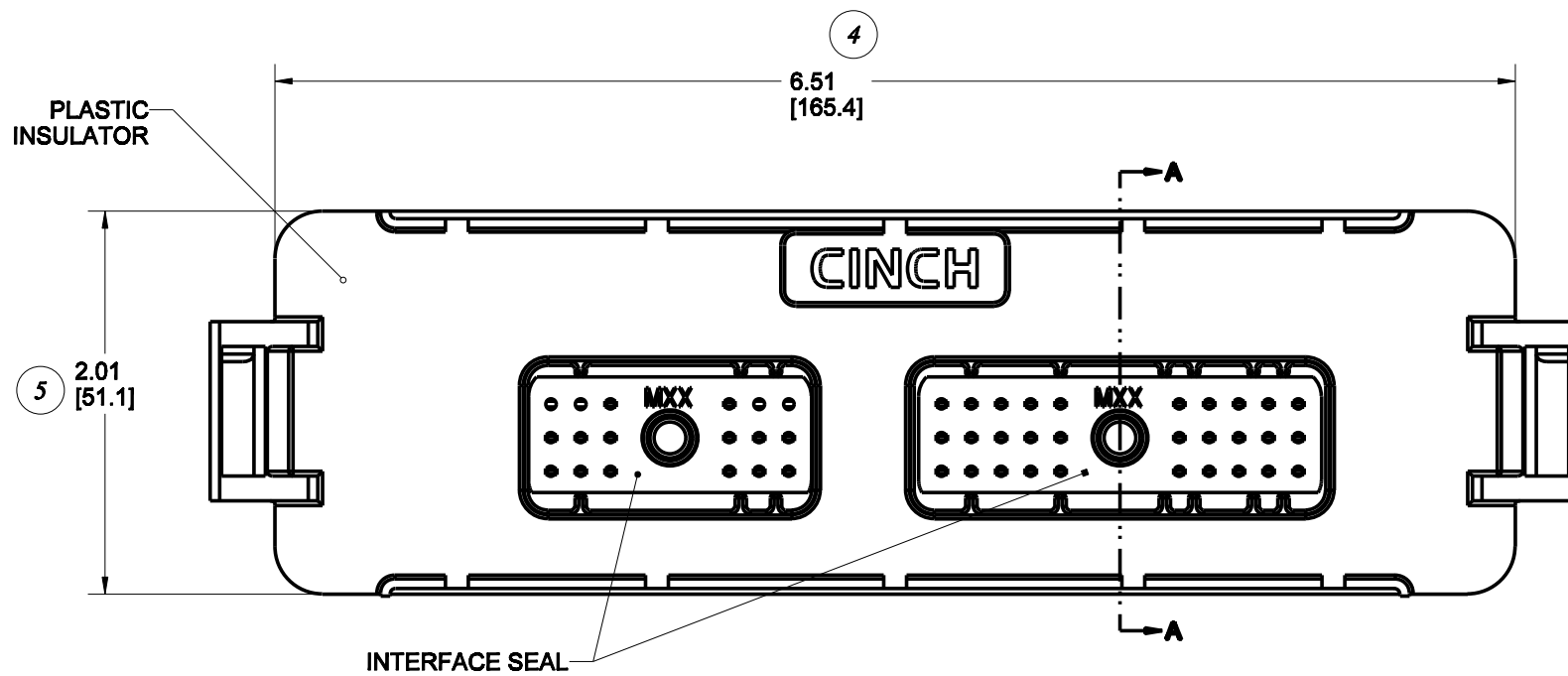
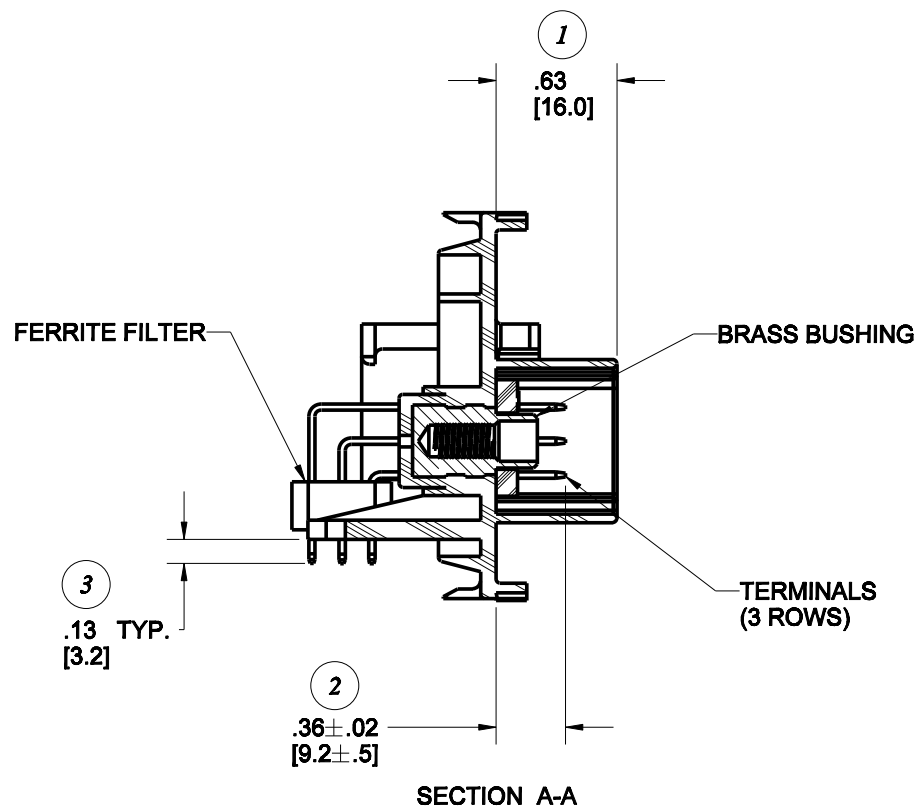
C

C

B

B

A



CINCH P/N: 581 01 48 008 SHOWN
(HEADER WITH FILTERS)

UNITS ENGLISH		Cinch		1700 FINLEY RD LOMBARD, IL 60148	
DO NOT SCALE DRAWING		TITLE 48-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 5810148008_HEADER	DRAWING NUMBER 581 01 48 006S	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	1:2	SHEET 2 OF 6

8

7

6

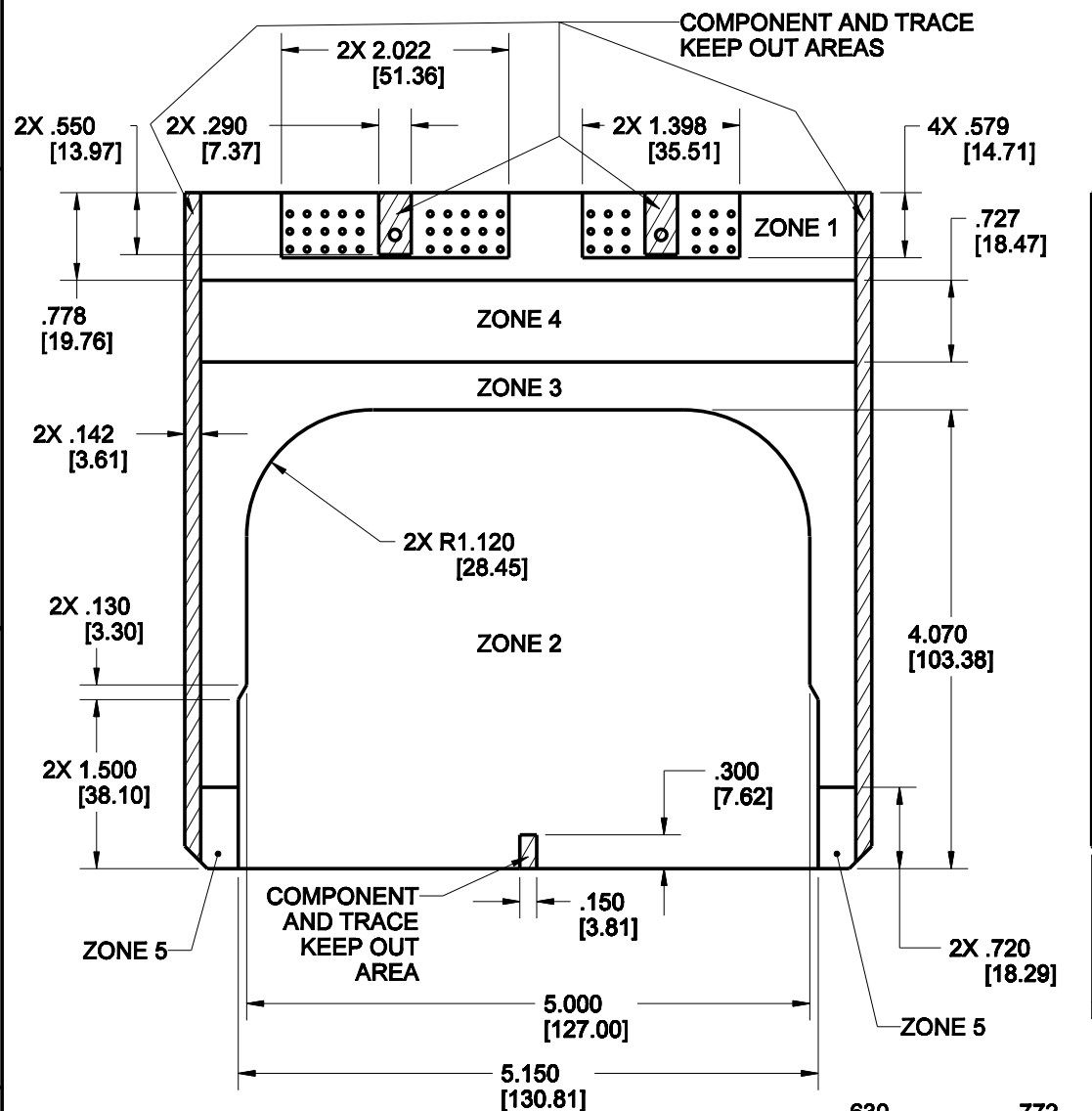
5

4

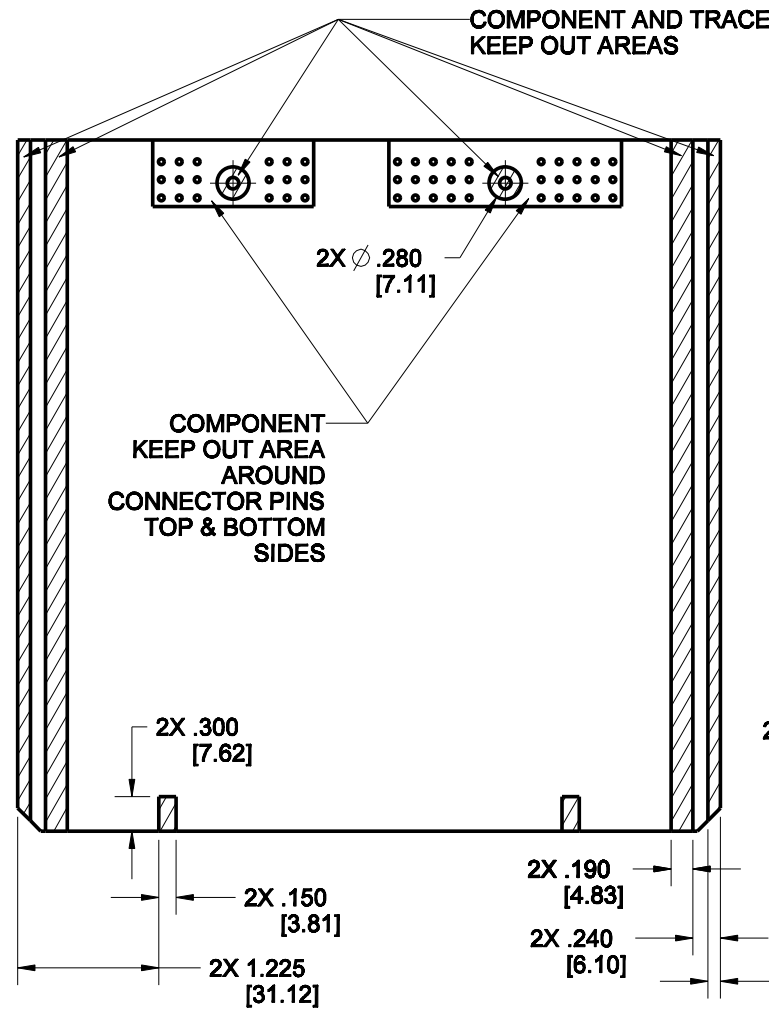
1

PCB LAY-OUT WITH OUT HEAT SINKS

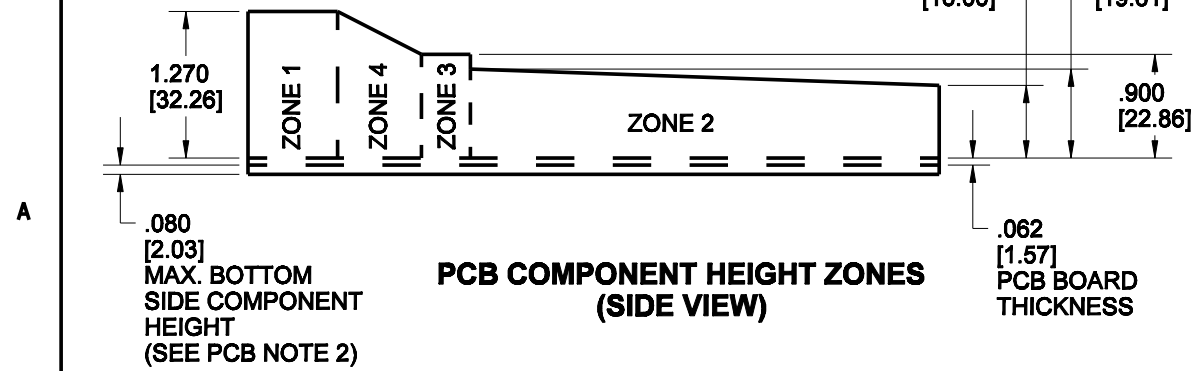
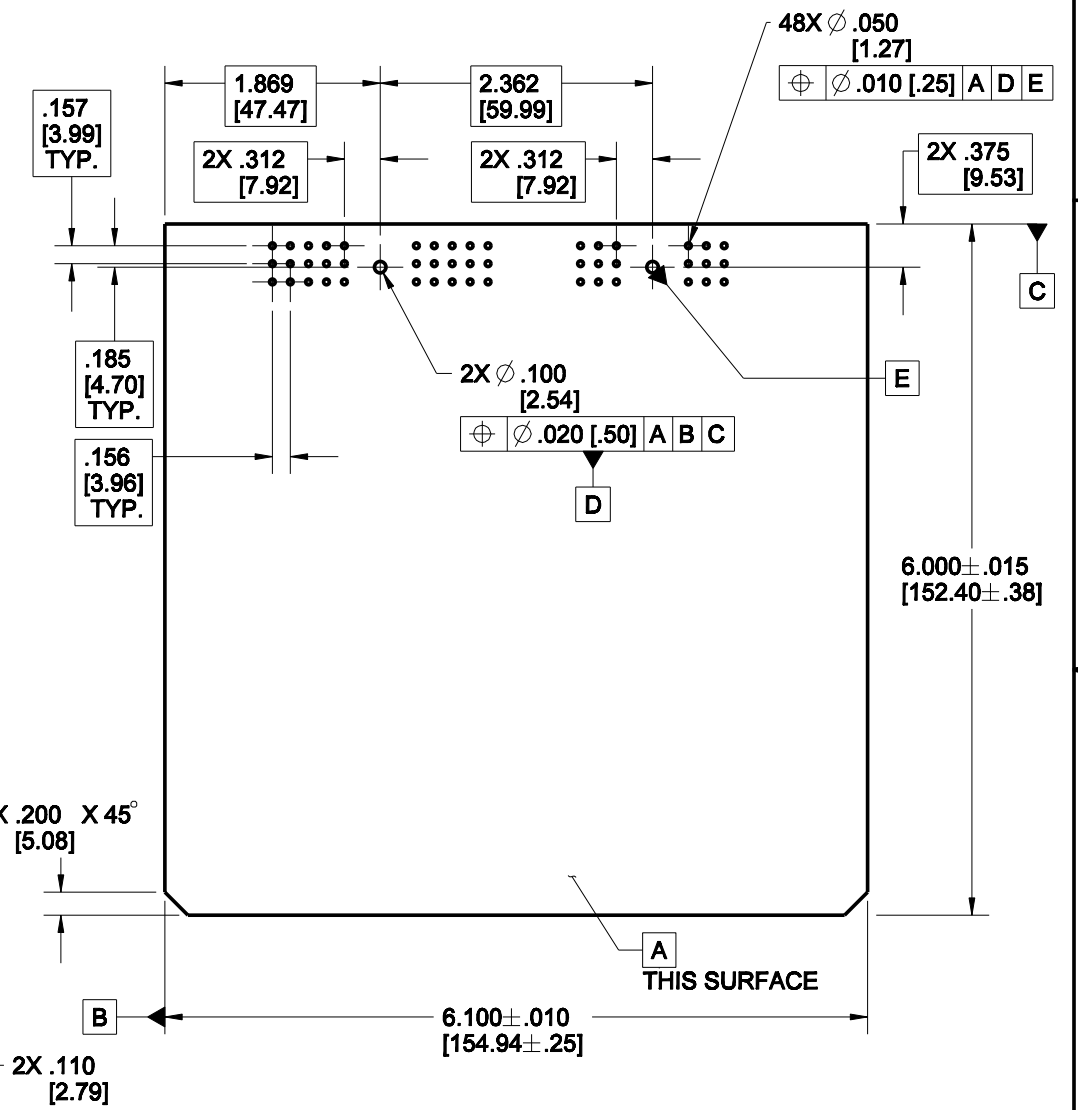
PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS



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**

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES

FILLET/RADI .02 MAX TOLERANCES .X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5

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.

Cinch 1700 FINLEY RD LOMBARD, IL 60148

TITLE **48-WAY HEADERS LE MODICE**

PRO/E DRAWING

CAD FILE NUMBER 5810148006_HEADER DRAWING NUMBER **581 01 48 006S** REV **C**

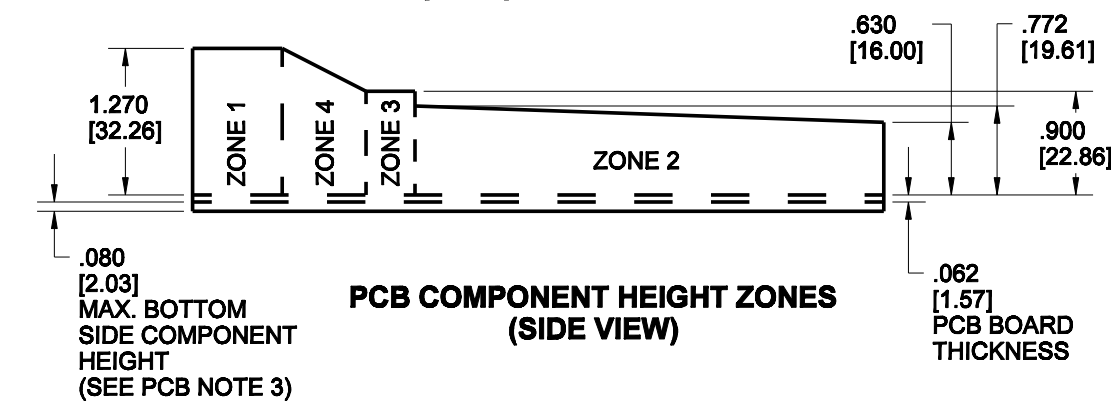
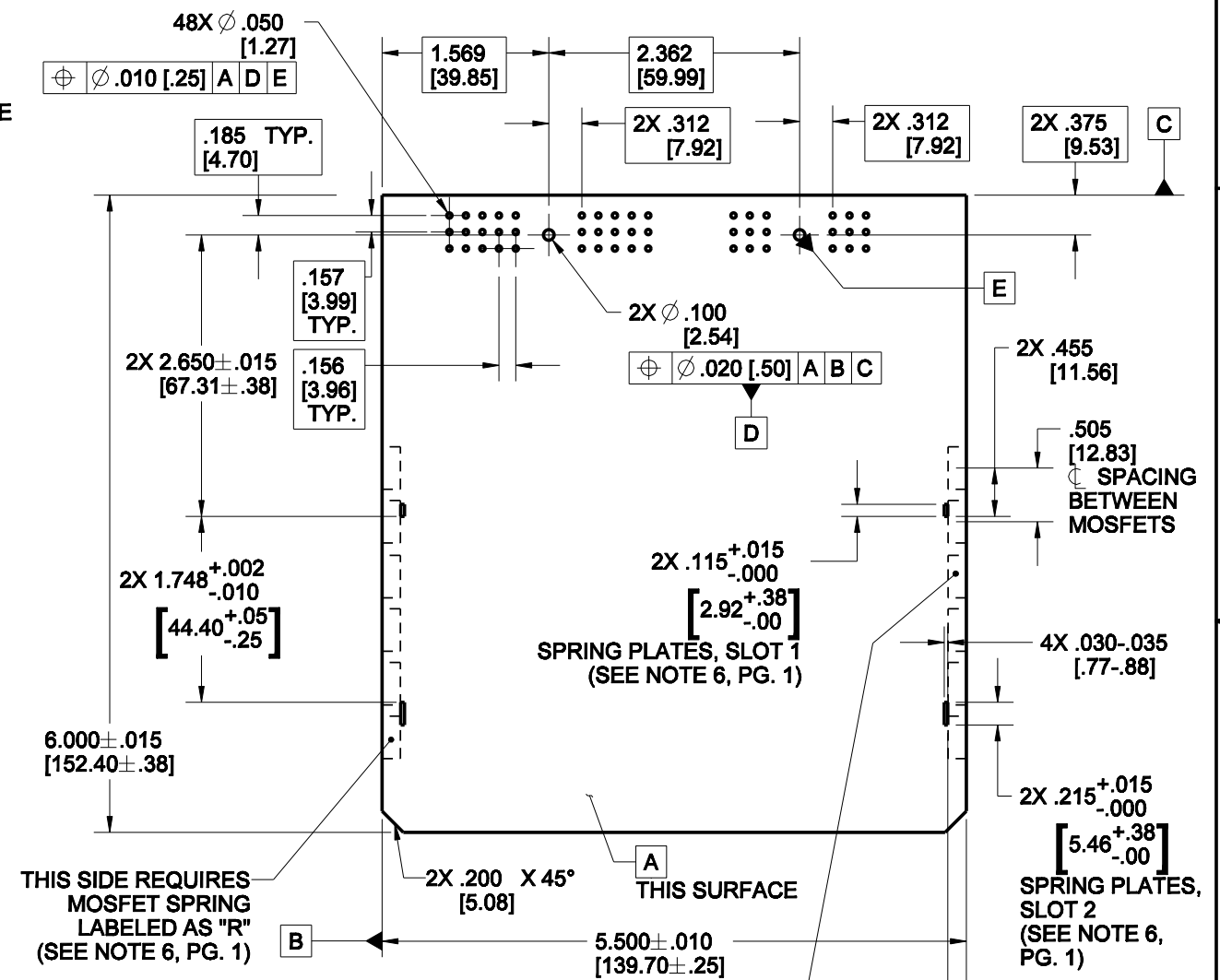
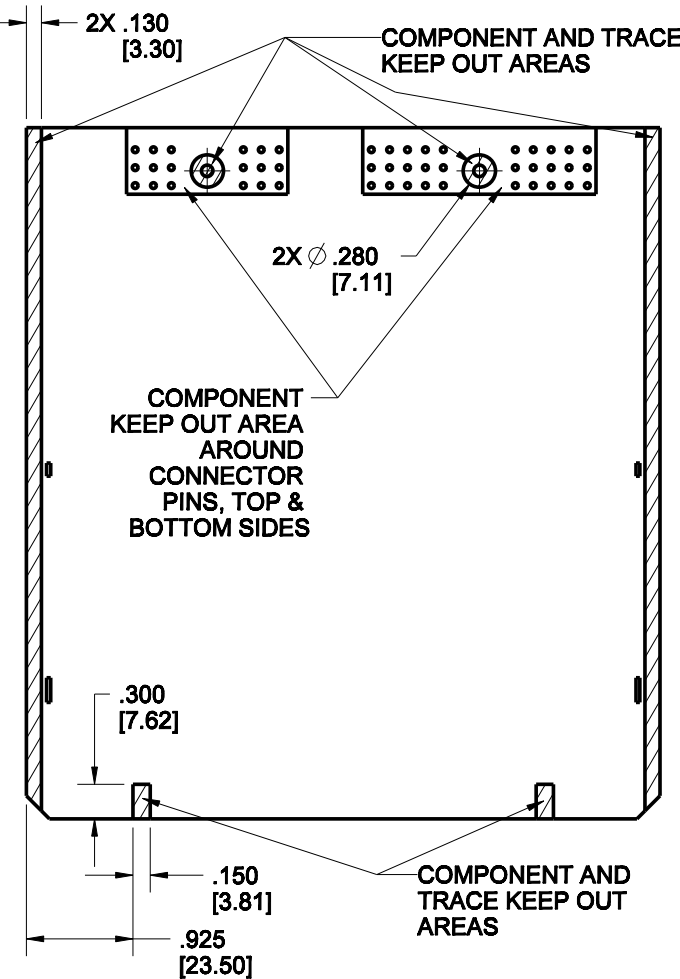
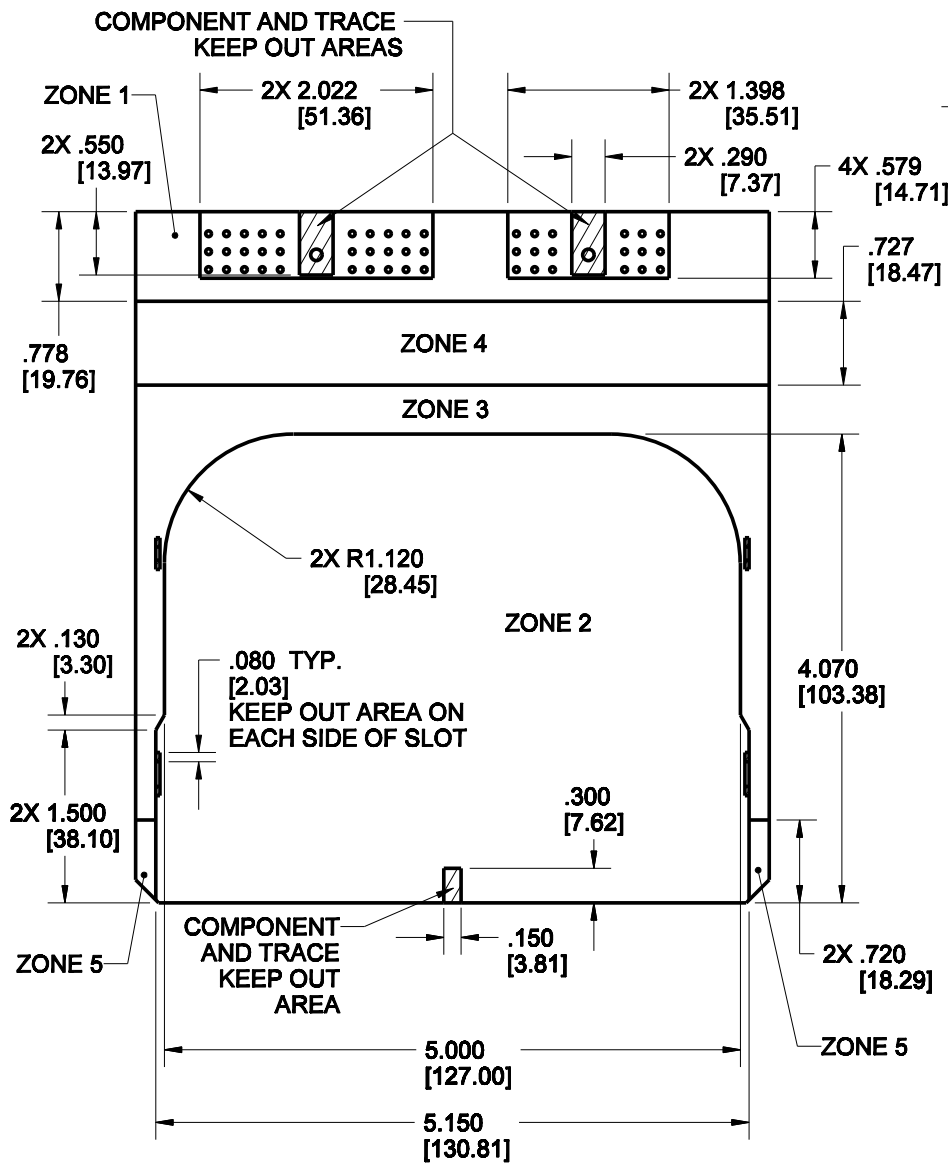
CAGE IDENT NO. **71785** SIZE **B** SCALE 3:5 SHEET 3 OF 6

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 HOLES 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:

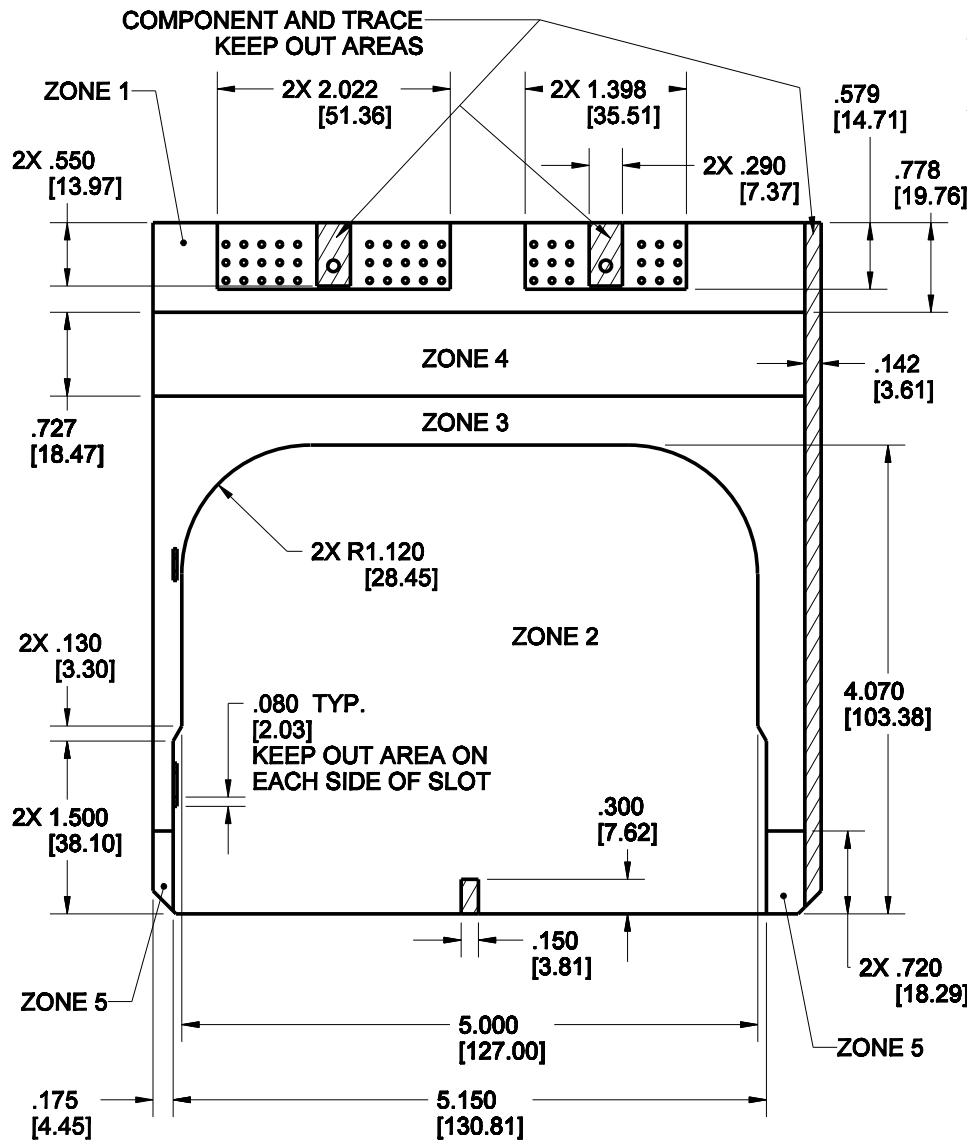
- IF MOSFET SPRINGS ARE USED, ZONE 3 SHOULD CONTAIN ONLY MOSFETS AND TRACES BETWEEN THE SPRINGS AND EDGE OF THE BOARD.
- ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB.
- THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER 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)

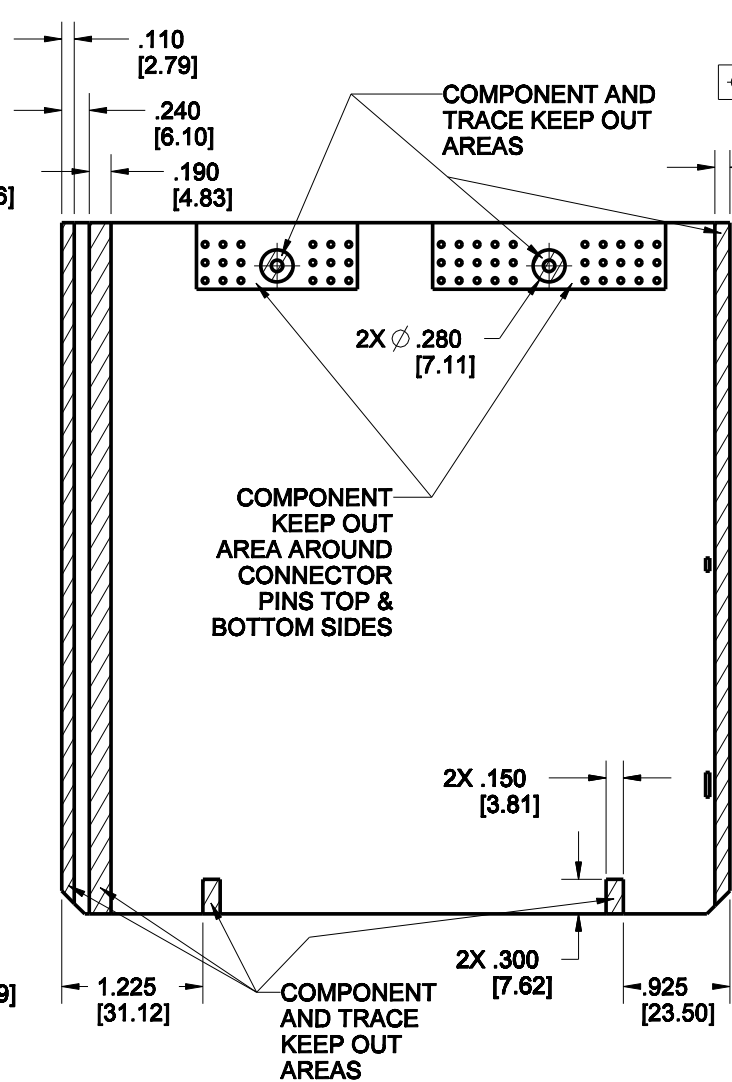
UNITS	ENGLISH		 1700 FINLEY RD LOMBARD, IL 60148
DO NOT SCALE DRAWING			
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES			TITLE
FILLET/RADI .02 MAX			48-WAY HEADERS LE MODICE
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH			PRO/E DRAWING
THIS DOCUMENT IS THE PROPERTY OF CINCH. NEITHER THIS DOCUMENT NOR ANY OF THE INFORMATION CONTAINED IN IT MAY BE DUPLICATED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF CINCH.			CAD FILE NUMBER
			5810148006_HEADER
			DRAWING NUMBER
			581 01 48 006S
			REV
			C
			SCALE
			3:5
			SHEET 4 OF 6

PCB LAY-OUT WITH ONE HEAT SINK

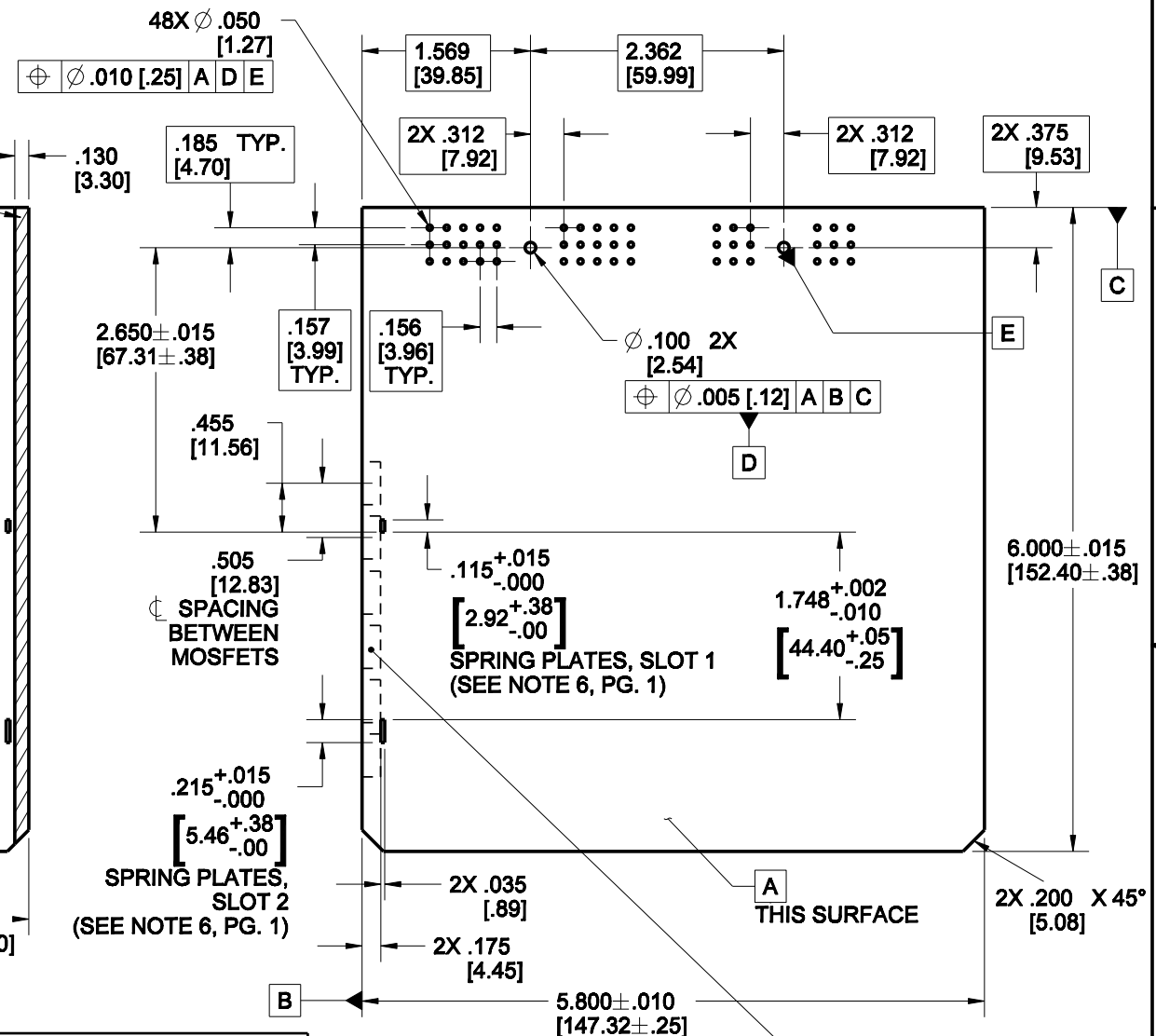
PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS



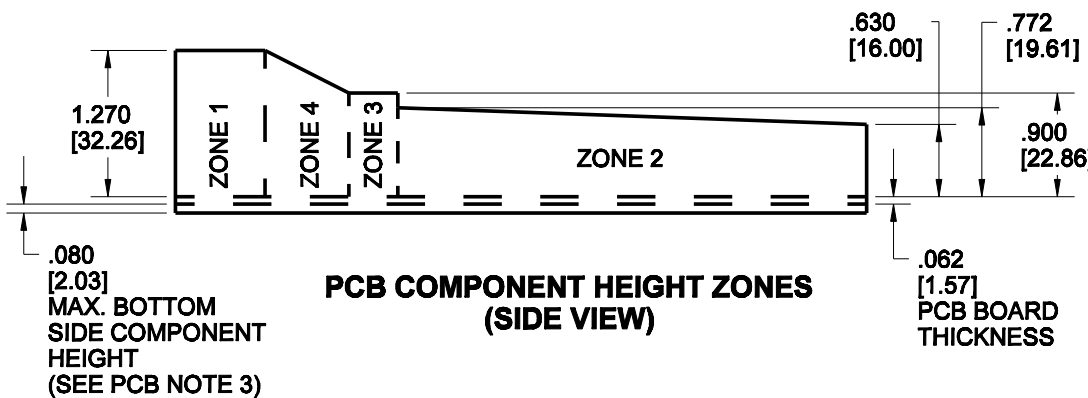
PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS



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	
DO NOT SCALE DRAWING			
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES			
FILLET/RADI	TOLERANCES	Cinch	
.02 MAX	X \pm .1	1700 FINLEY RD	
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH	.XX \pm .01	LOMBARD, IL 60148	
	.00X \pm .005	TITLE	
	ANGULAR \pm .5	48-WAY HEADERS LE MODICE	
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	DRAWING NUMBER	PRO/E DRAWING	
5810148006_HEADER	581 01 48 006S	REV	
CAGE IDENT NO.	SIZE	C	
71785	B	SCALE	
		3:5 SHEET 5 OF 6	

8

7

6

5

4

3

2

1

D

D

C

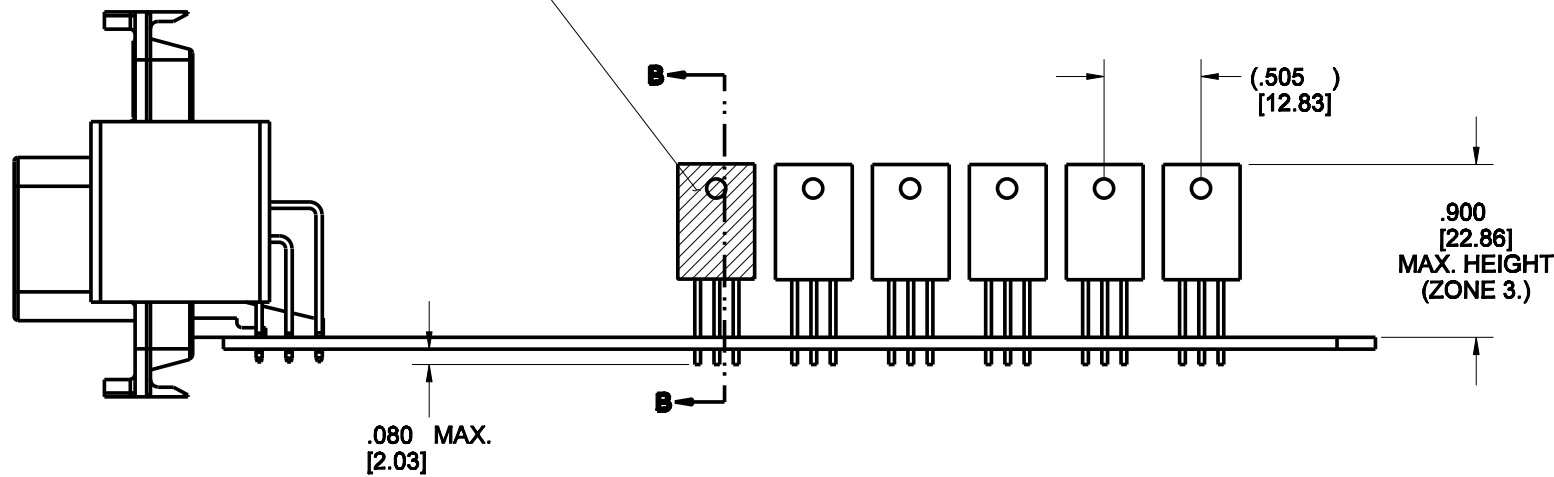
C

B

B

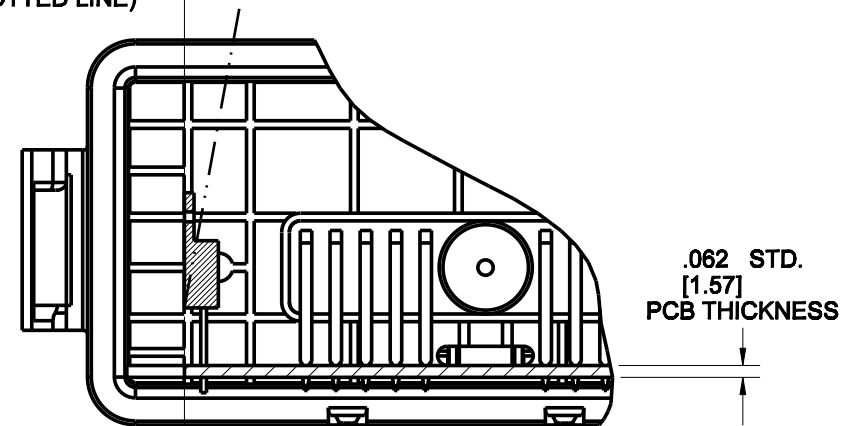
A

APPLY THIN BEAD OF THERMALLY CONDUCTIVE ADHESIVE PASTE TO ENTIRE SURFACE OF EVERY MOSFET (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)

SECTION B-B

UNITS ENGLISH	Cinch		1700 FINLEY RD LOMBARD, IL 60148
DO NOT SCALE DRAWING	TITLE 48-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 5810148006_HEADER	DRAWING NUMBER 581 01 48 006S
TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH	CAGE IDENT NO. 71785	SIZE B	SCALE 1:1
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.	REV C		SHEET 6 OF 6

8

7

6

5

4

1