

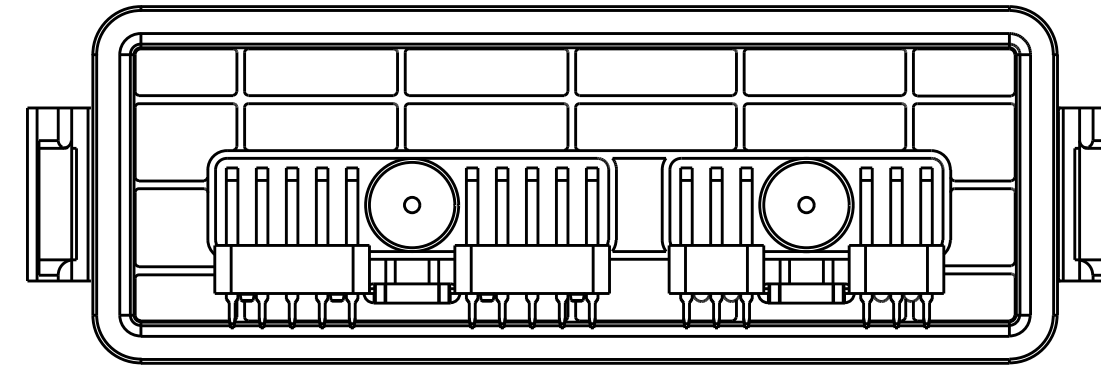
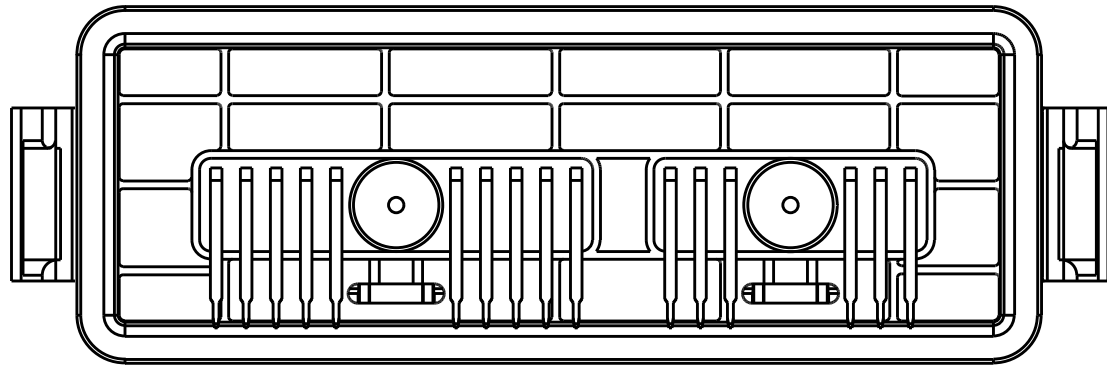
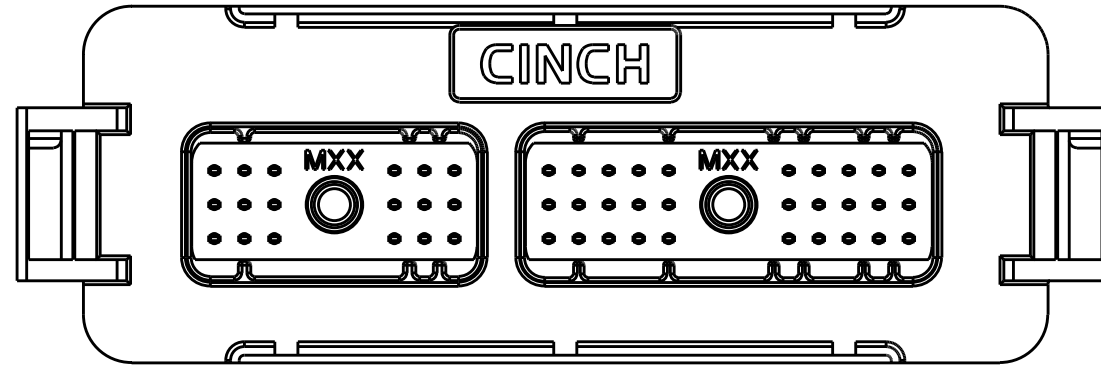
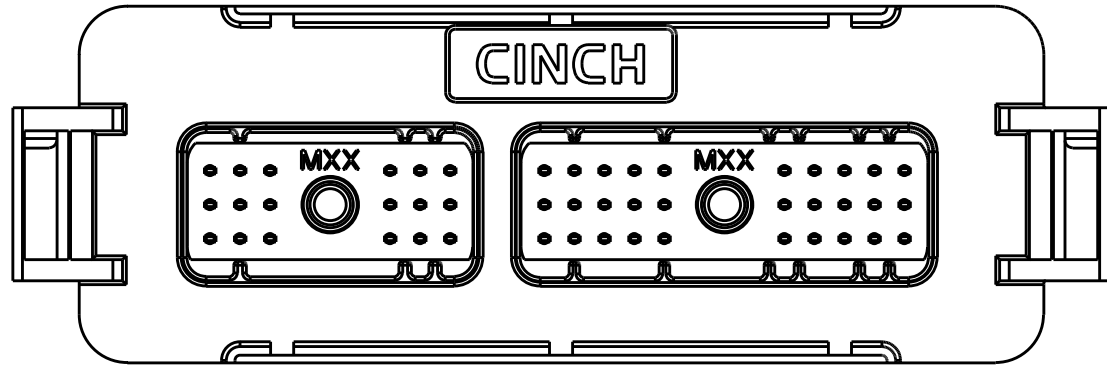
CINCH PART NUMBER MATRIX

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)

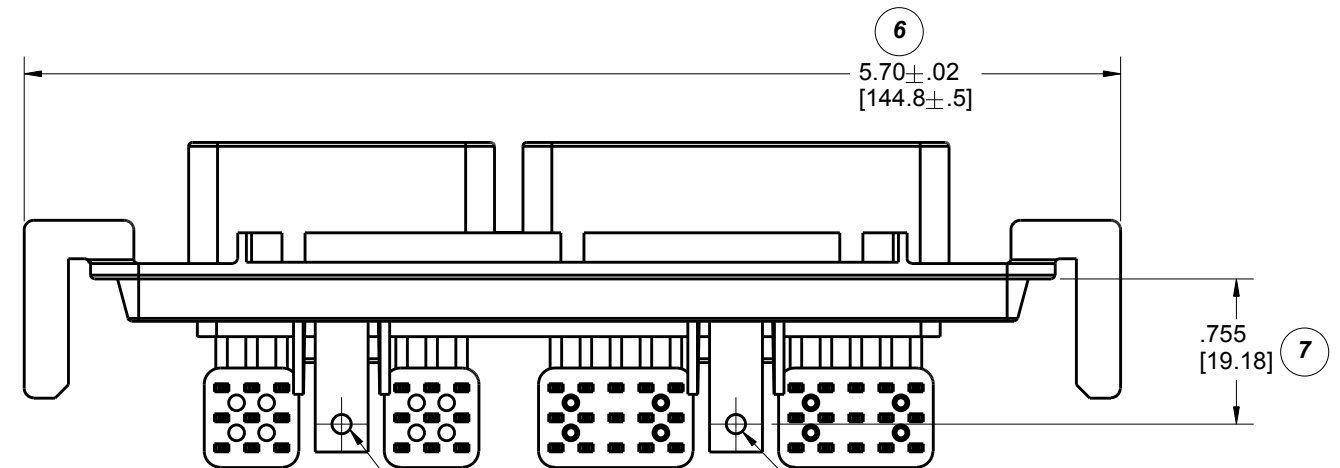
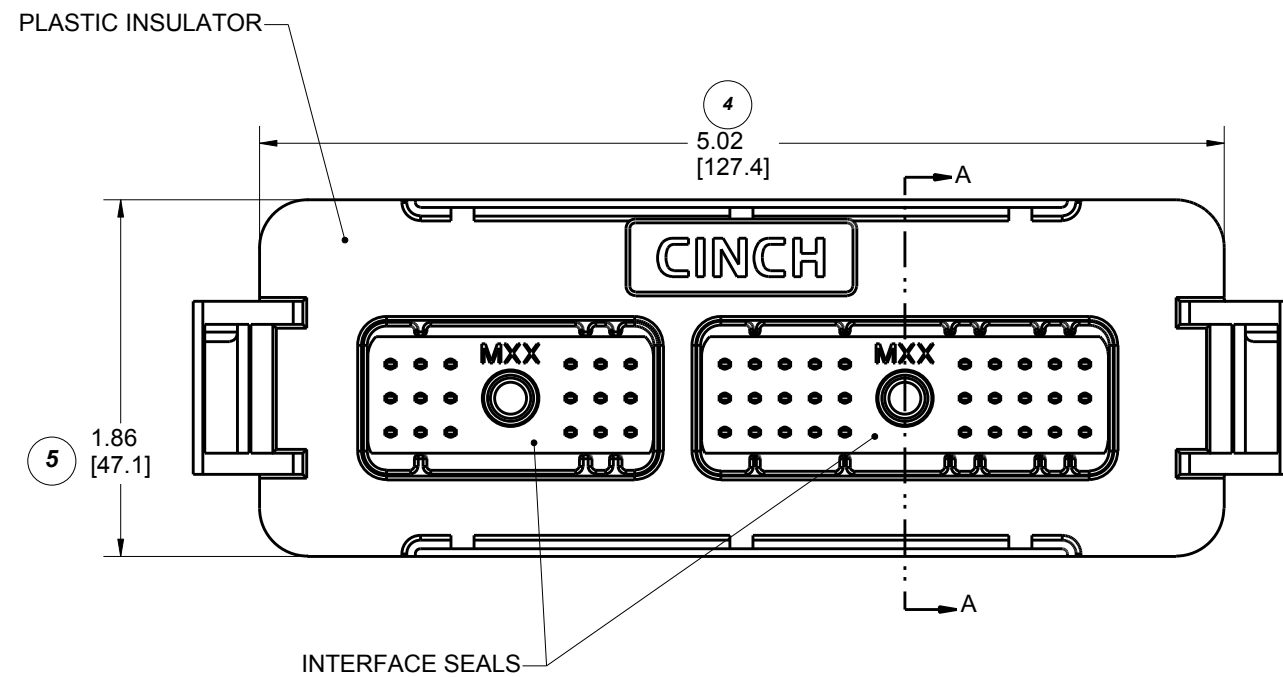
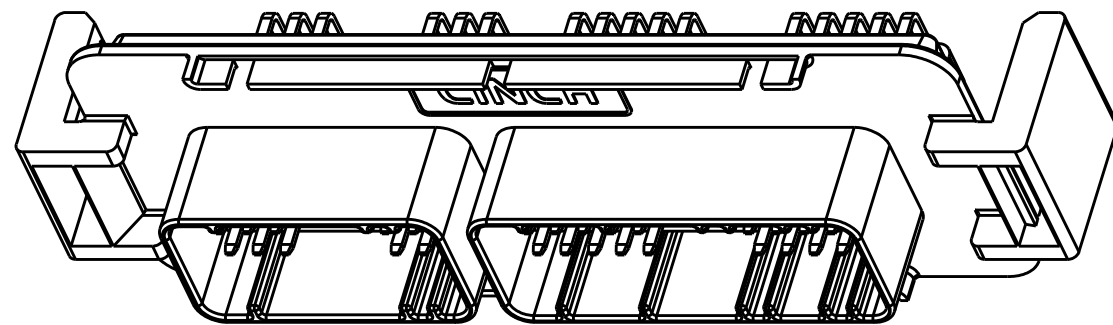
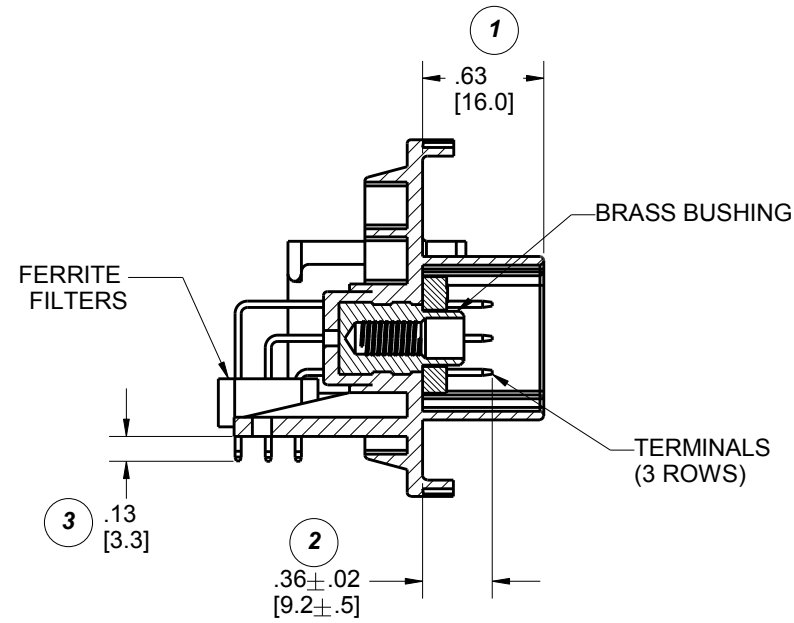
DRAWING REVISIONS

| 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 |
| E | CO 4256 | N.C. | 3/31/20 |

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.

| UNITS | | RoHS COMPLIANT | | MODELED BY: | |
|---|--|-------------------------|----------|---------------------------|---------------------|
| ENGLISH | INCHES | PRO/E | | CINCH | |
| DO NOT SCALE DRAWING | | DESIGN BY | DATE | TITLE | |
| UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES | | B. KOSTIC | 09/03/04 | SE HEADERS MODULAR ICE | |
| FILLET/RADII .02 MAX | TOLERANCES .X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5° | DESIGN ENGINEER | | MATERIAL | CONTROL SPEC NUMBER |
| | | B. KOSTIC | 09/03/04 | SEE NOTE 2. | |
| | | DESIGN ENGINEERING MGR. | | MATERIAL SPEC NUMBER | PROJECT NUMBER |
| | | A. CAINES | 11/18/04 | A 14562 | |
| | | MFG. ENGINEERING | | CAD FILE NUMBER | DRAWING NUMBER |
| | | R. GARZA | 11/18/04 | 5810148005S | 581 01 48 005 S |
| | | QUALITY ASSURANCE | | CAGE IDENT NO. | SCALE |
| | | R. QUIROZ | 11/18/04 | 71785 | B 1:1 |
| | | | | SIZE | SHEET 1 OF 6 |

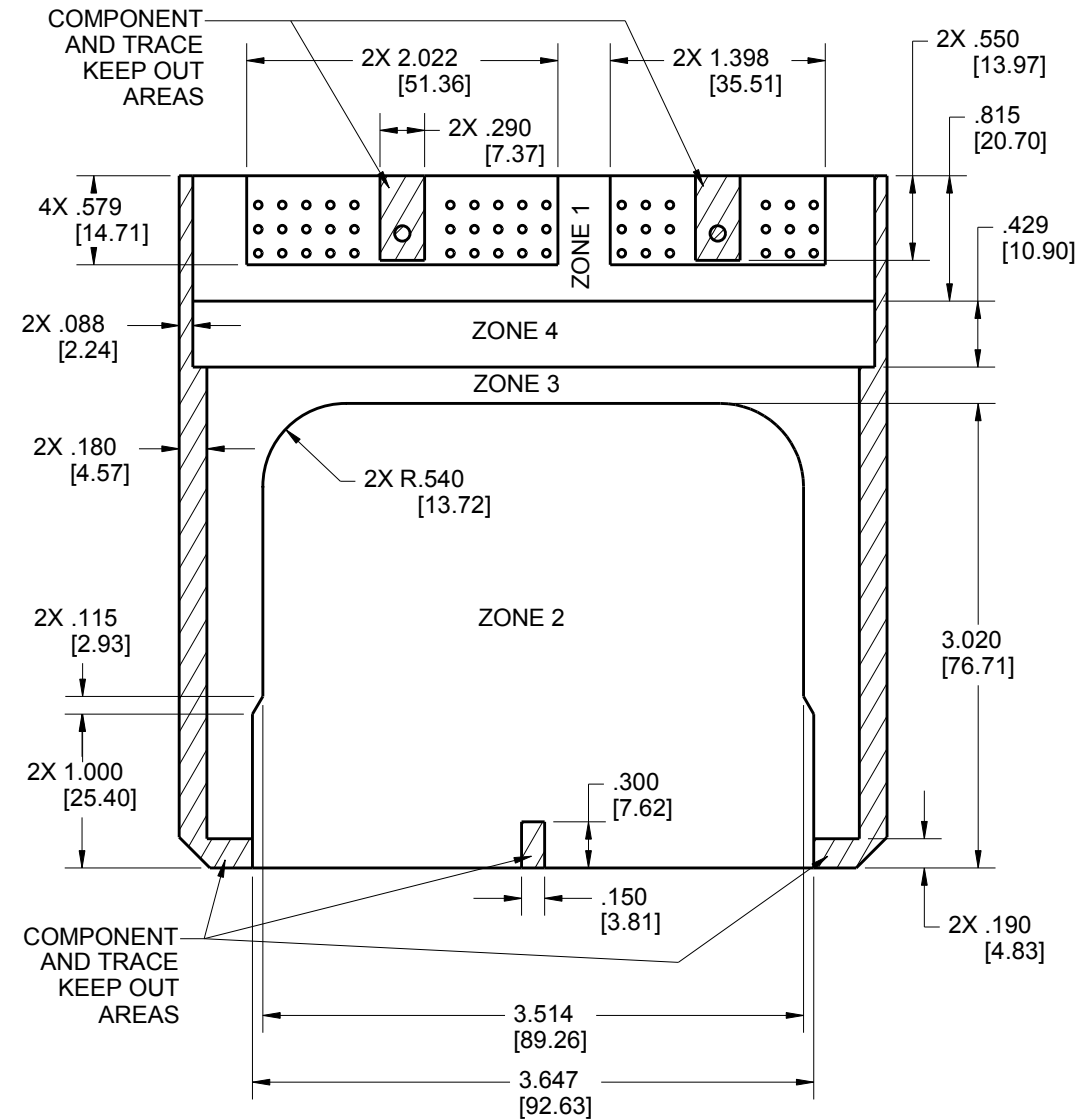


**CINCH P/N: 581 01 48 007 SHOWN
(HEADER WITH FILTERS)**

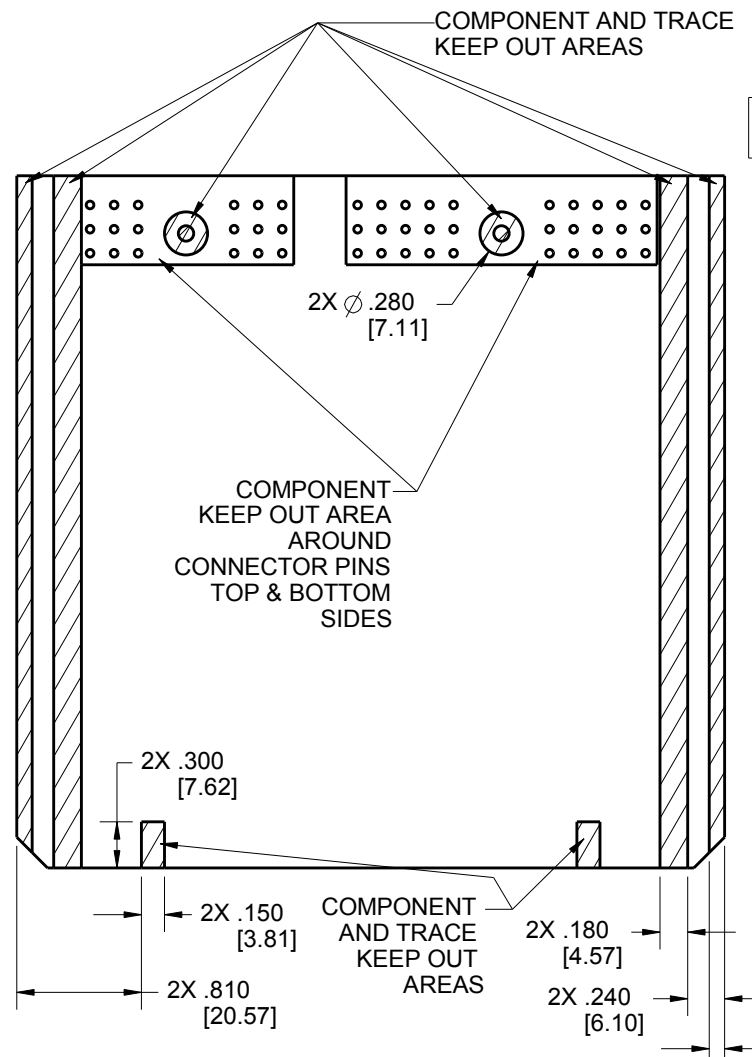
| | | | | | |
|--|--|---|-----------|--------------------------------------|-----------------------------------|
| UNITS ENGLISH | | CINCH | | 1700 FINLEY RD LOMBARD, IL. 60148 | |
| DO NOT SCALE DRAWING | | TITLE SE HEADERS MODULAR ICE | | | |
| UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES | | PRO/E DRAWING | | | |
| FILLET/RADII .02 MAX | | TOLERANCES X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5° | | CAD FILE NUMBER 5810148005S | DRAWING NUMBER 581 01 48 005 S |
| TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH | | CAGE IDENT NO. 71785 | SIZE B | SCALE 1:1 | REV E |
| 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. | | SHEET 2 OF 6 | | | |

PCB LAYOUT WITHOUT HEAT SINKS

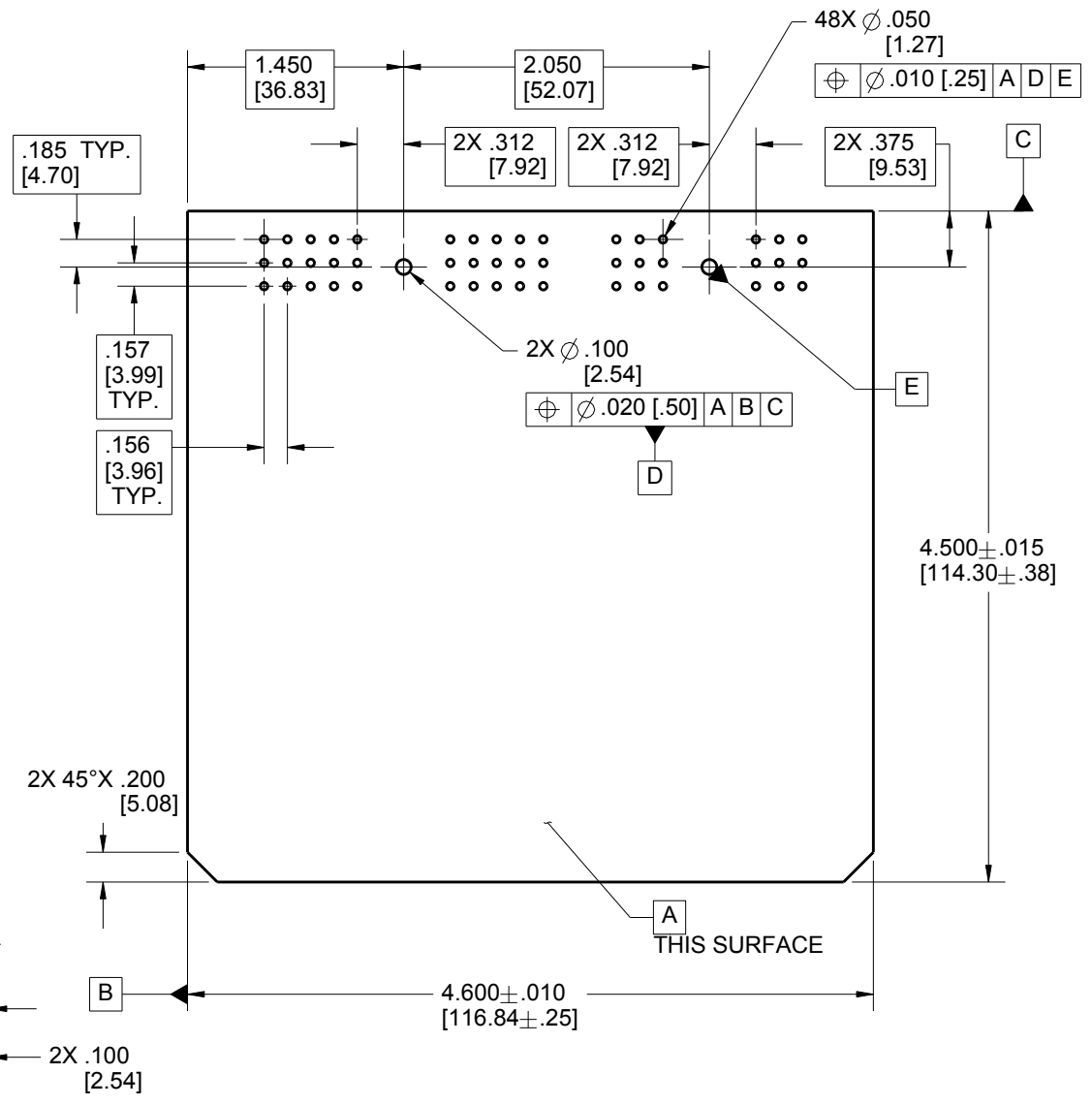
PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS



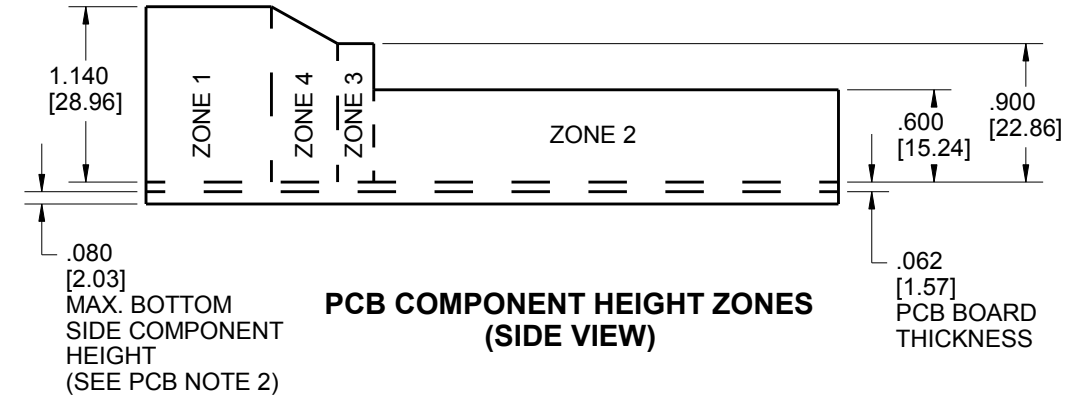
PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS



PCB OVERALL DIMENSIONS AND HOLE LOCATIONS



PCB COMPONENT HEIGHT ZONES (SIDE VIEW)



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.

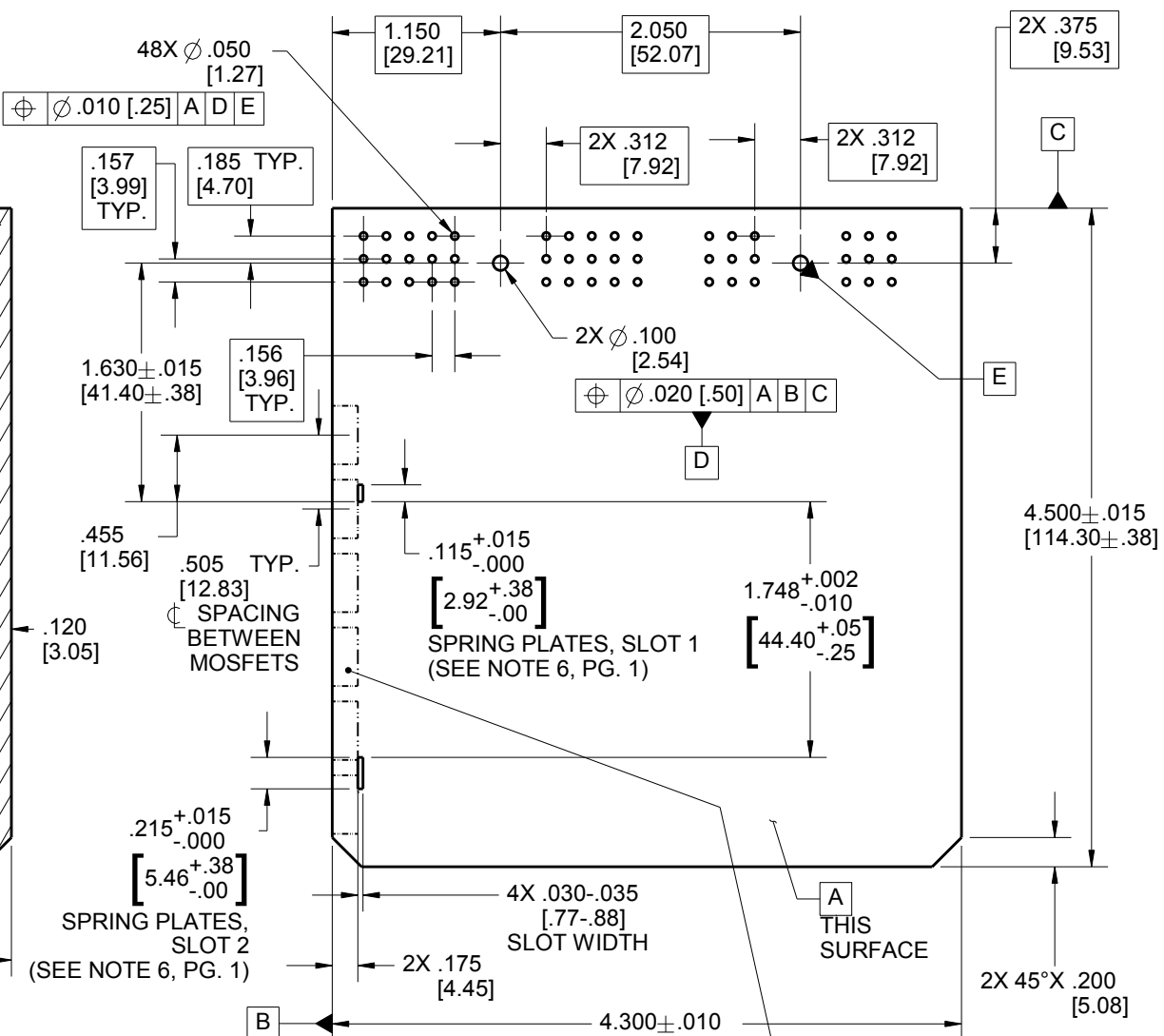
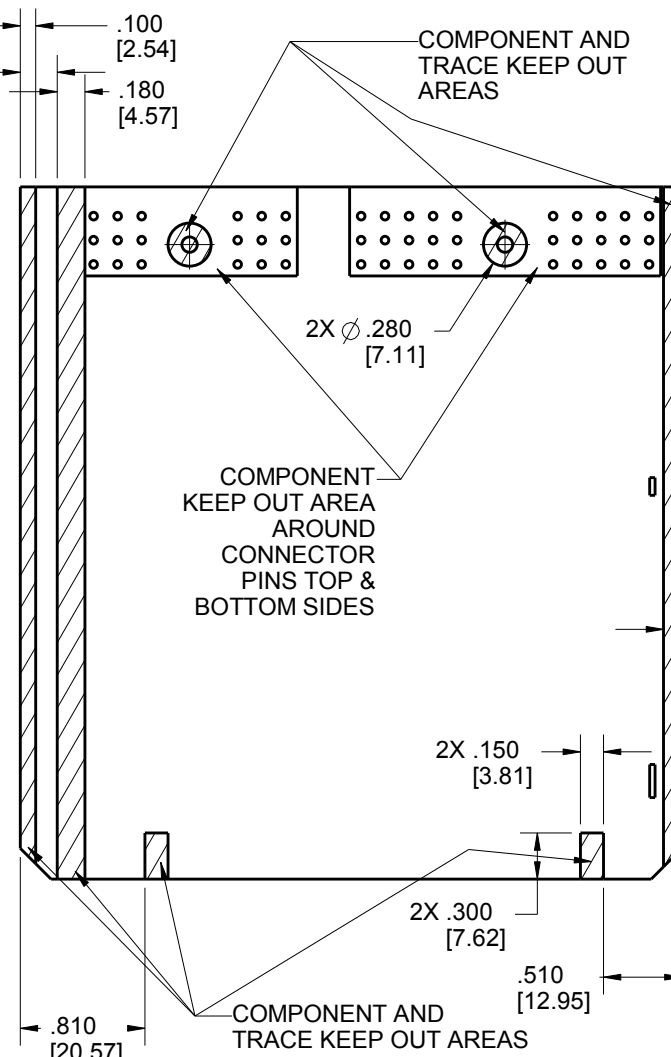
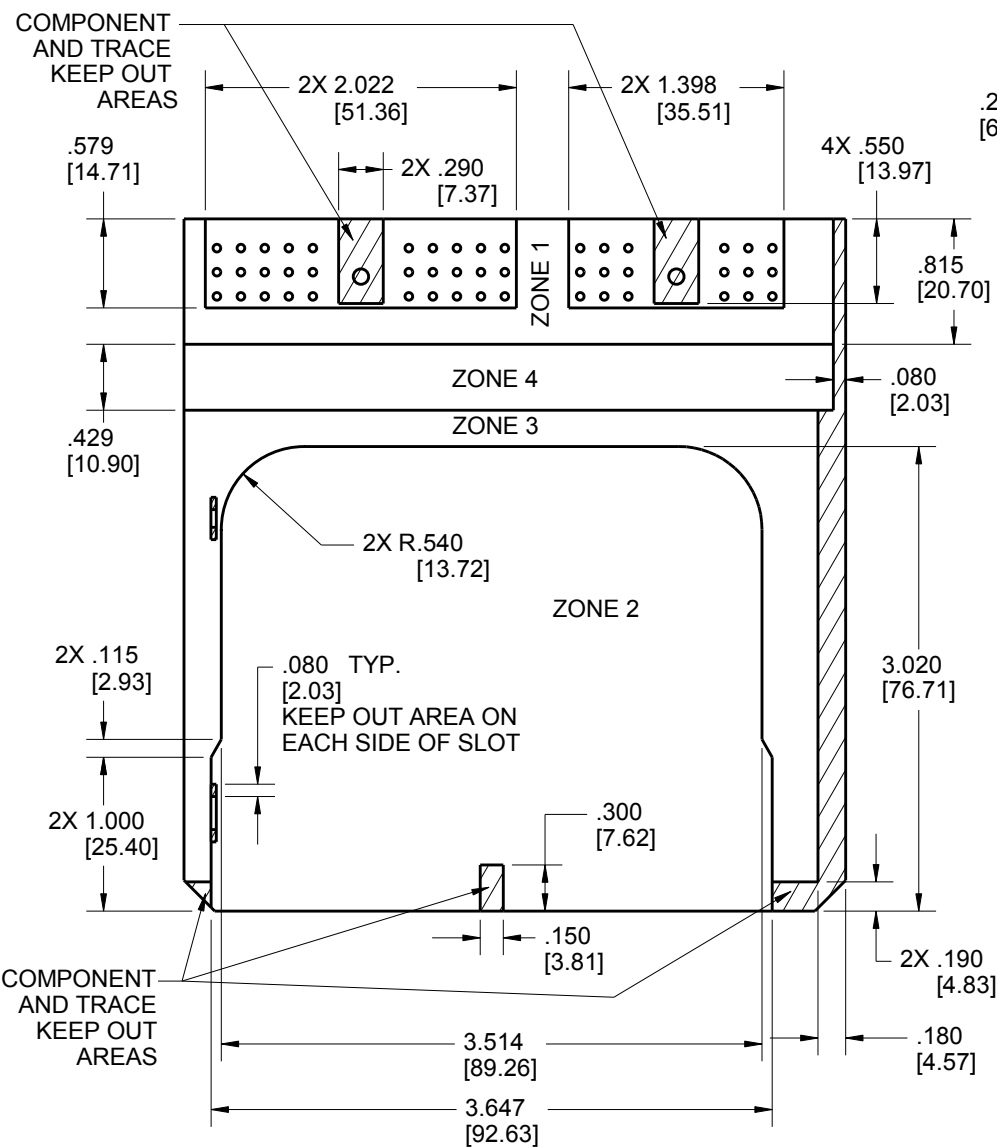
| | | | |
|---|---|--------------------------------|--------------------------------------|
| UNITS ENGLISH | CINCH | | 1700 FINLEY RD LOMBARD, IL. 60148 |
| DO NOT SCALE DRAWING | TITLE SE HEADERS MODULAR ICE | | |
| UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES | PRO/E DRAWING | | |
| FILLET/RADII .02 MAX | TOLERANCES X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5° | CAD FILE NUMBER 5810148005S | DRAWING NUMBER 581 01 48 005 S |
| 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. 71785 | SCALE 4:5 |
| | | SIZE B | SHEET 3 OF 6 |

PCB LAYOUT WITH ONE HEAT SINK

PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS

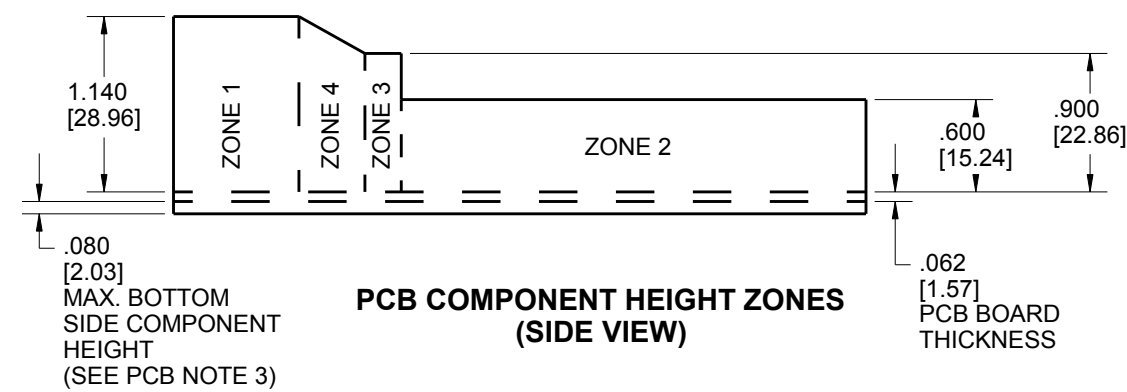
PCB OVERALL DIMENSIONS AND HOLE LOCATIONS



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.



| | | | | | |
|---|--|-----------|-----------------|--------------|--------------------------------------|
| UNITS | ENGLISH | | CINCH | | 1700 FINLEY RD LOMBARD, IL. 60148 |
| DO NOT SCALE DRAWING | TITLE: SE HEADERS MODULAR ICE | | | | |
| UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES | TOLERANCES | | | | |
| FILLET/RADII .02 MAX | X ± .1 | | XX ± .01 | | XXX ± .005 |
| TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH | 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. | DRAWING NUMBER 581 01 48 005 S | | REV E | | |
| CAD FILE NUMBER 5810148005S | CAGE IDENT NO. 71785 | SIZE B | SCALE 4:5 | SHEET 5 OF 6 | |

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)

8

7

6

5

4

3

2

1

D

D

C

C

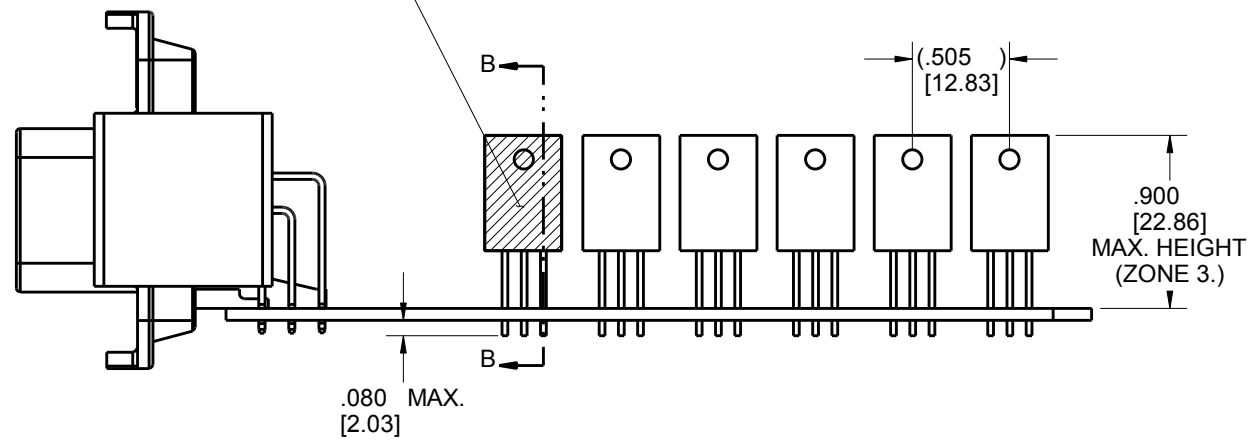
B

B

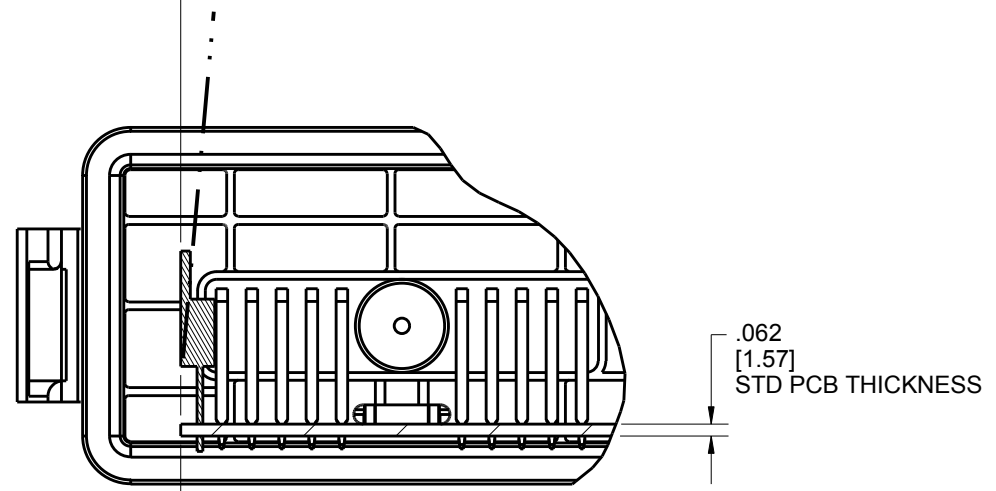
A

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

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



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



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

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

| | | | | | |
|--|--|---|-----------|--------------------------------------|-----------------------------------|
| UNITS ENGLISH | | CINCH | | 1700 FINLEY RD LOMBARD, IL. 60148 | |
| DO NOT SCALE DRAWING | | TITLE SE HEADERS MODULAR ICE | | | |
| UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES | | PRO/E DRAWING | | | |
| FILLET/RADII .02 MAX | | TOLERANCES X ± .1 XX ± .01 XXX ± .005 ANGULAR ± .5° | | CAD FILE NUMBER 5810148005S | DRAWING NUMBER 581 01 48 005 S |
| TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH | | CAGE IDENT NO. 71785 | SIZE B | SCALE 1:1 | REV E |
| 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. | | SHEET 6 OF 6 | | | |

8

7

6

5

4

3

2

1