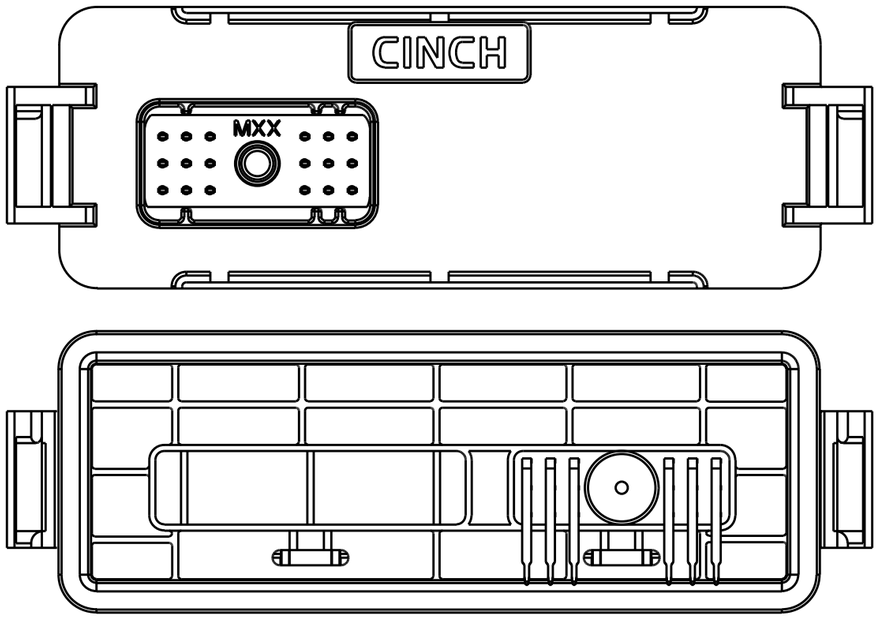
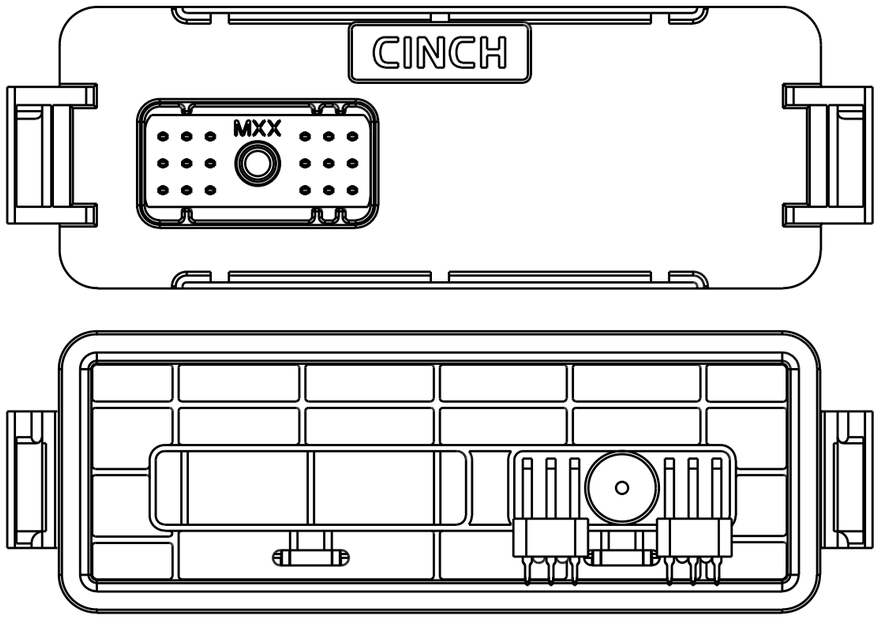
# CINCH PART NUMBER MATRIX

| P/N: 581 01 18 032 | P/N: 581 01 18 033 |
|---|---|
| 18-WAY HEADER ASSEMBLY WITHOUT FERRITE FILTERS | 18-WAY HEADER ASSEMBLY WITH FERRITE FILTERS |
|  |  |
| MATES WITH CINCH HARNESS CONNECTORS P/N:<br>581 01 18 023 (18-WAY) | |



| DRAWING REVISIONS | | | |
|---|---|---|---|
| REV | DOCUMENT | APP | DATE |
| A | REL. FOR PRODUCTION<br>D.O. 05-1157 | A.C. | 7/21/05 |
| B | ECN: 05A468<br>ADDED LEGS AND<br>ADDED SLOTS TO RIBS | A.C. | 9/27/05 |
| C | ECN: 06A032<br>ADDED SHEET 5<br>ADDED SHEET 6<br>MODIFIED SHEET 3<br>MODIFIED SHEET 4 | A.C. | 3/23/06 |
| D | ECN: 06A410<br>REFORMATTED DRAWING<br>PCB LAYOUTS REDRAWN<br>WITH ADDITIONAL KEEP<br>OUT AREAS | A.C. | 9/29/06 |
| E | CO 4256 | N.C. | 3/31/20 |

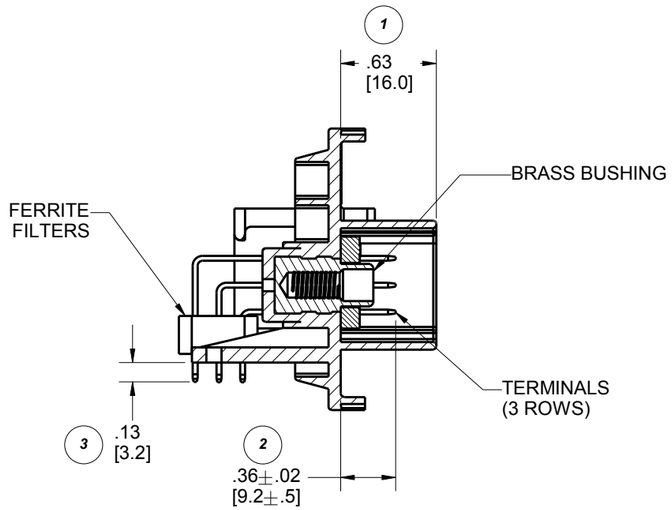
NOTE:

1. ALL DIMENSIONS ARE IN INCHES;
   DIMENSION INSIDE [.XX] ARE IN MM, AS REF. ONLY.
2. 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.
3. ALL HEADERS ARE REFLOW OR WAVE SOLDERING PROCESS, ROHS COMPLIANT.
4. MATES WITH CINCH SHS PUSH-TO-SEAT HARNESS CONNECTORS (SEE TABLE ABOVE).
5. THERMALLY CONDUCTIVE ADHESIVE PASTE SOLD SEPARATLY: RECOMMENDED IS LOCTITE 383.
6. 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)
7. STANDARD PACKAGE SIZE: 72 PARTS/CARTON BOX.

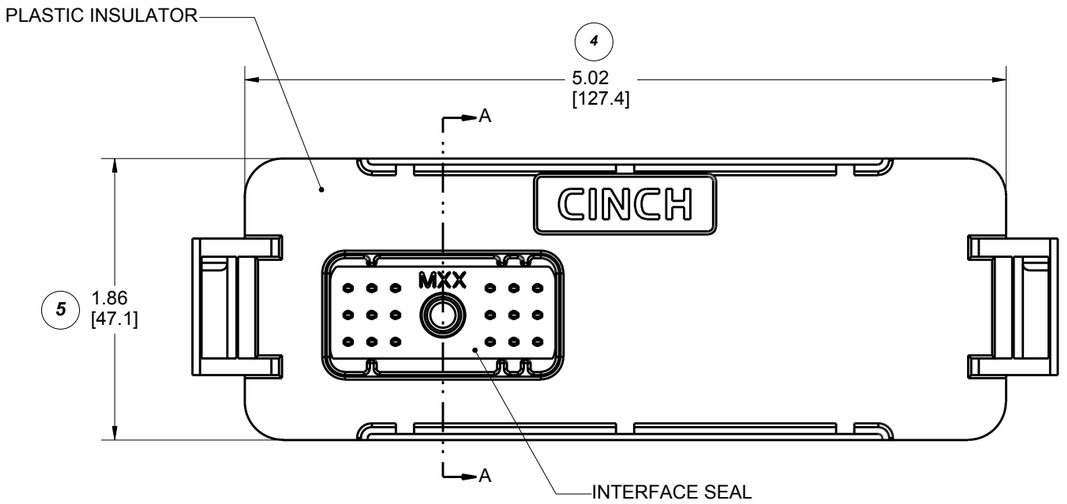
RoHS COMPLIANT

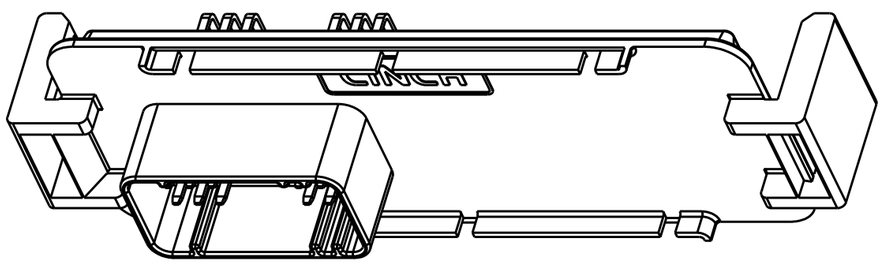
MODELED BY:

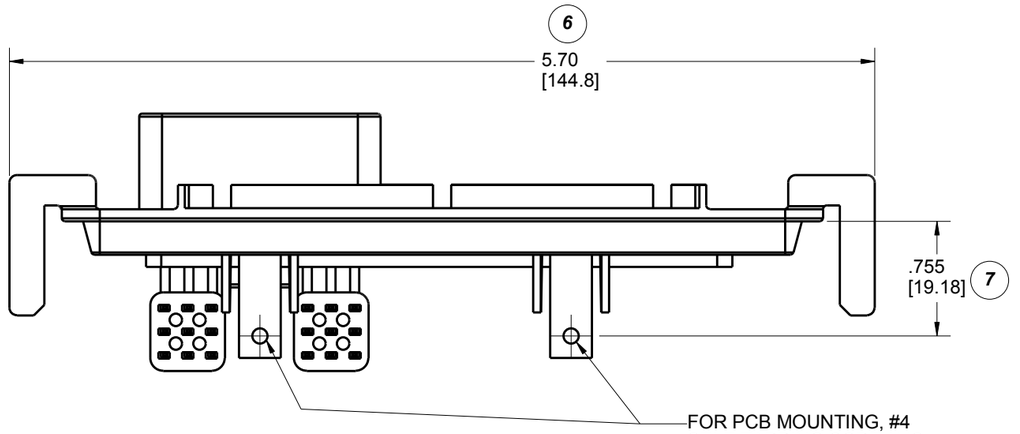
| | | | |
|---|---|---|---|
| UNITS: ENGLISH | PRO/E | CINCH | 1700 FINLEY RD<br>LOMBARD, IL. 60148 |
| DO NOT SCALE DRAWING | DRAWN BY: B. KOSTIC — DATE: 09/03/04 | TITLE: 18-WAY HEADERS<br>MODICE SE | |
| UNLESS OTHERWISE SPECIFIED:<br>ALL DIMENSIONS ARE IN INCHES<br>FILLET/RADII .02 MAX<br>TOLERANCES: X ± .1, .XX ± .01, .XXX ± .005, ANGULAR ± .5°<br>TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH | DESIGN ENGINEER: B. KOSTIC — 09/03/04 | MATERIAL: SEE NOTE 2. | CONTROL SPEC NUMBER: |
| | DESIGN ENGINEERING MGR.: A. CAINES — 11/18/04 | MATERIAL SPEC NUMBER / FINISH | PROJECT NUMBER: A 14562 |
| | MFG. ENGINEERING: R. GARZA — 11/18/04 | CAD FILE NUMBER: 5810118032S_HEADERS | DRAWING NUMBER: 581 01 18 032 S |
| | QUALITY ASSURANCE: R. QUIROZ — 11/18/04 | CAGE IDENT NO.: 71785 — SIZE: B | SCALE: 1:1 — SHEET 1 OF 6 |




**SECTION A-A**



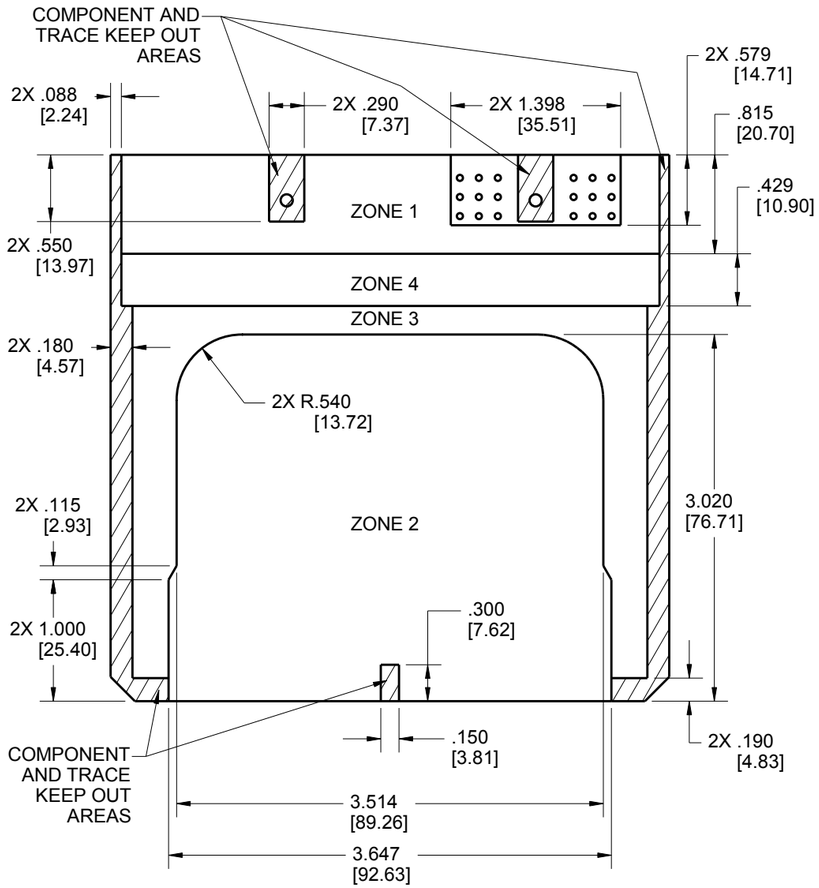




**CINCH P/N: 581 01 18 033 SHOWN**
**(HEADER WITH FILTERS)**

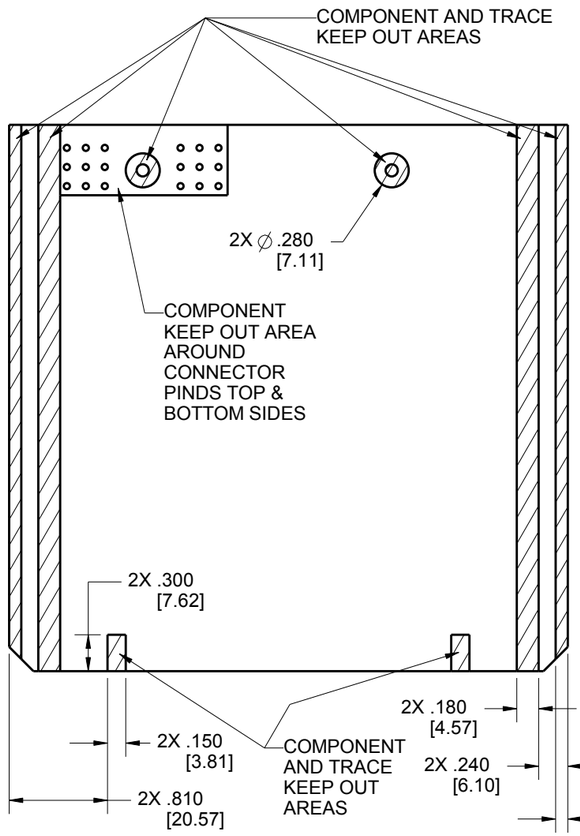
| | | |
|---|---|---|
| UNITS ENGLISH | CINCH | 1700 FINLEY RD LOMBARD, IL. 60148 |
| DO NOT SCALE DRAWING | TITLE: 18-WAY HEADERS MODICE SE | |
| UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES<br>FILLET/RADII .02 MAX<br>TOLERANCES<br>.X ± .1<br>.XX ± .01<br>.XXX ± .005<br>ANGULAR ± .5°<br>TOLERANCES 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: 5810118032S_HEADERS<br>DRAWING NUMBER: 581 01 18 032 S<br>REV: E<br>CAGE IDENT NO.: 71785<br>SIZE: B<br>SCALE: 1:1<br>SHEET 2 OF 6 | |

# PCB LAYOUT WITHOUT HEAT SINKS

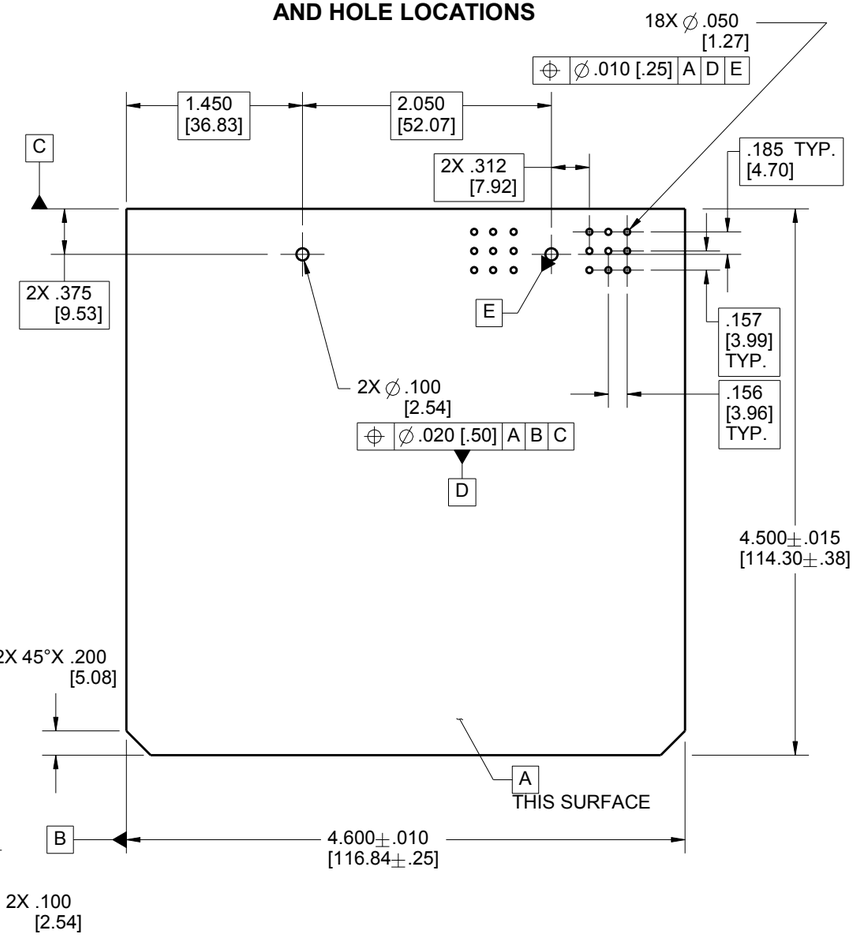
## PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

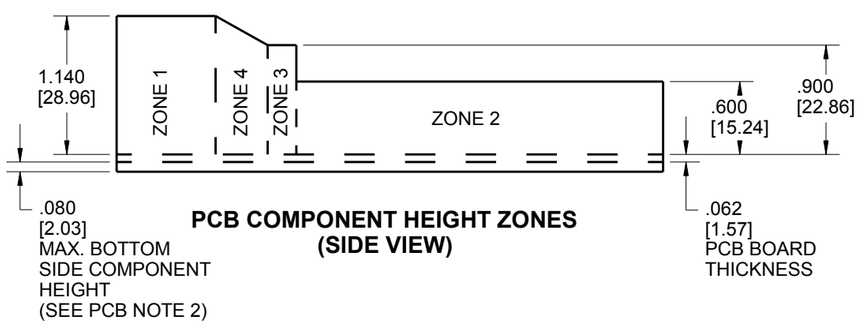



## PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS




## 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:

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**

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES

FILLET/RADII .02 MAX

TOLERANCES .X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5°

TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH



**CINCH**

1700 FINLEY RD
LOMBARD, IL. 60148

TITLE: 18-WAY HEADERS MODICE SE

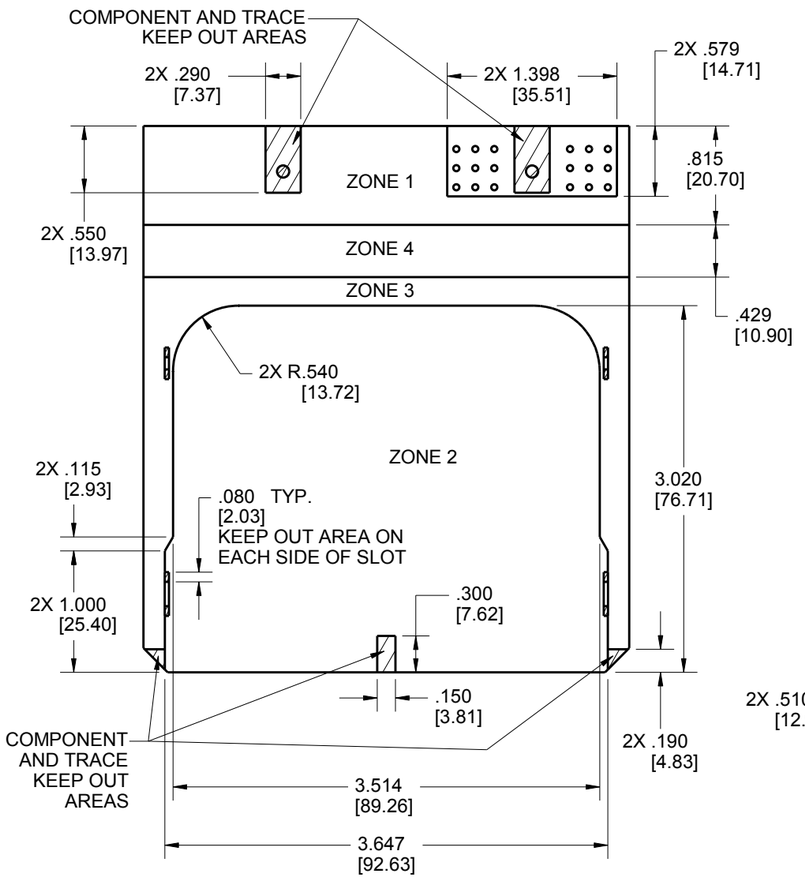
**PRO/E DRAWING**

| CAD FILE NUMBER | DRAWING NUMBER | REV |
|---|---|---|
| 5810118032S_HEADERS | 581 01 18 032 S | E |

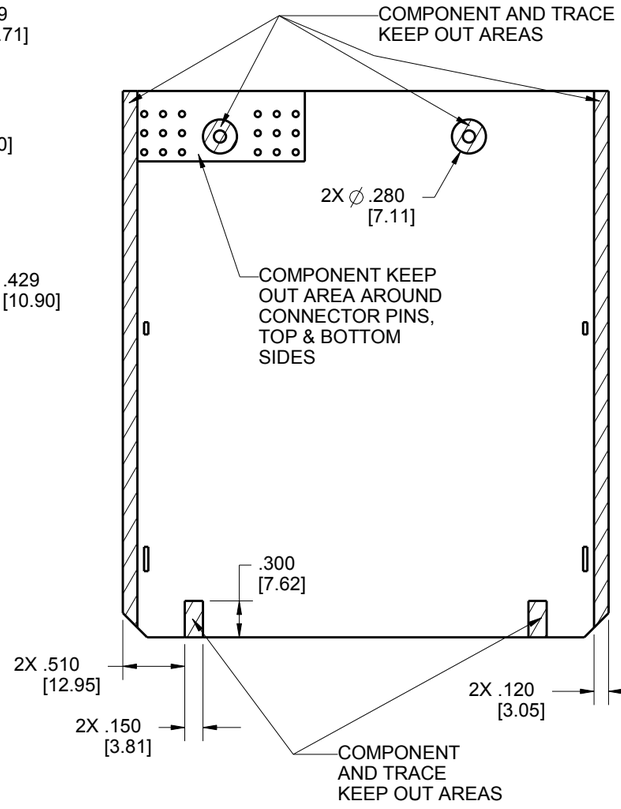
| CAGE IDENT NO. | SIZE | SCALE | SHEET |
|---|---|---|---|
| 71785 | B | 4:5 | SHEET 3 OF 6 |

# PCB LAYOUT WITH TWO HEAT SINKS

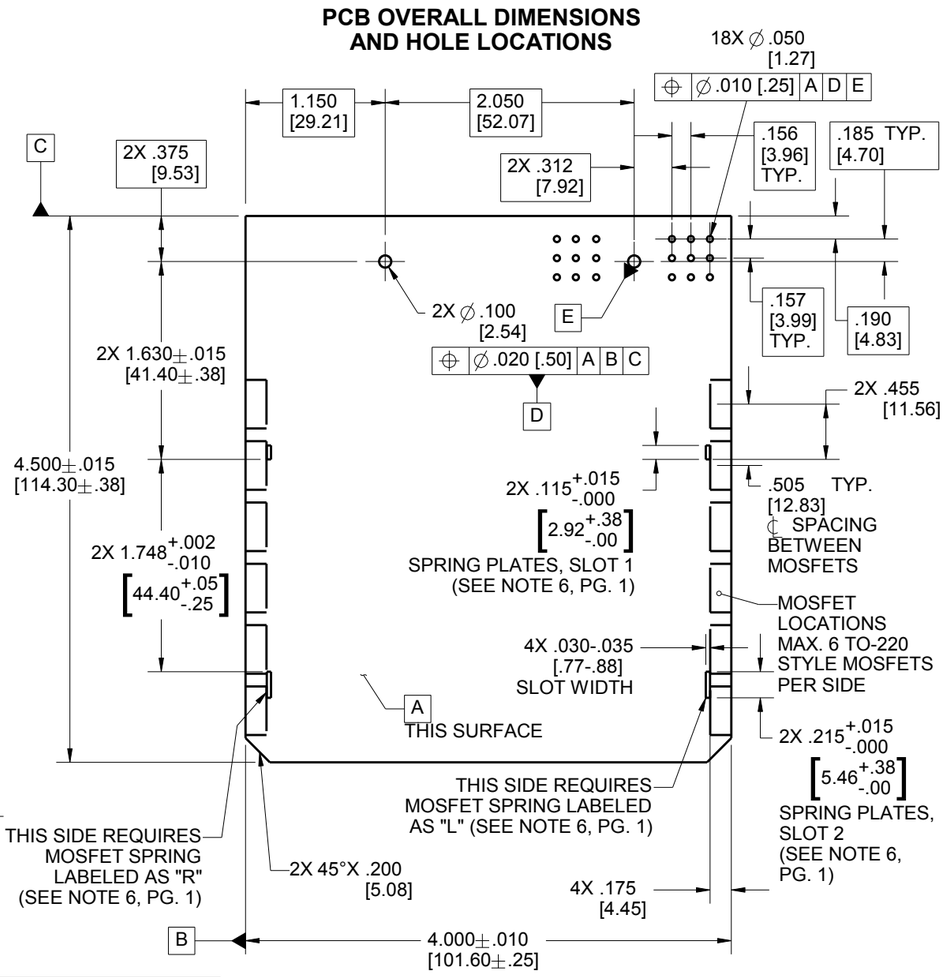
## PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

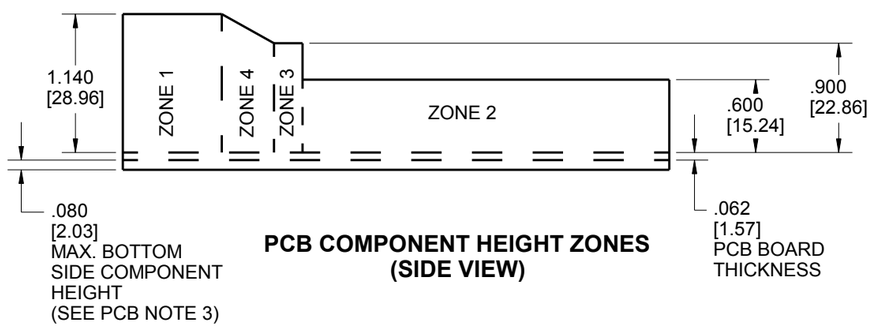



## PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS




## PCB OVERALL DIMENSIONS AND HOLE LOCATIONS




**PCB 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 4 |

PCB NOTES:

1. IF MOSFET SPRINGS ARE USED, ZONE 3 SHOULD CONTAIN ONLY MOSFETS AND TRACES BETWEEN THE SPRINGS AND EDGE OF THE BOARD.
2. ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB.
3. THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 6 SIDE VIEW).
4. 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/RADII .02 MAX

TOLERANCES: X ± .1, .XX ± .01, .XXX ± .005, ANGULAR ± .5°

TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH



CINCH
1700 FINLEY RD
LOMBARD, IL. 60148

TITLE: 18-WAY HEADERS MODICE SE

PRO/E DRAWING

CAD FILE NUMBER: 5810118032S_HEADERS

DRAWING NUMBER: 581 01 18 032 S

REV: E

CAGE IDENT NO.: 71785

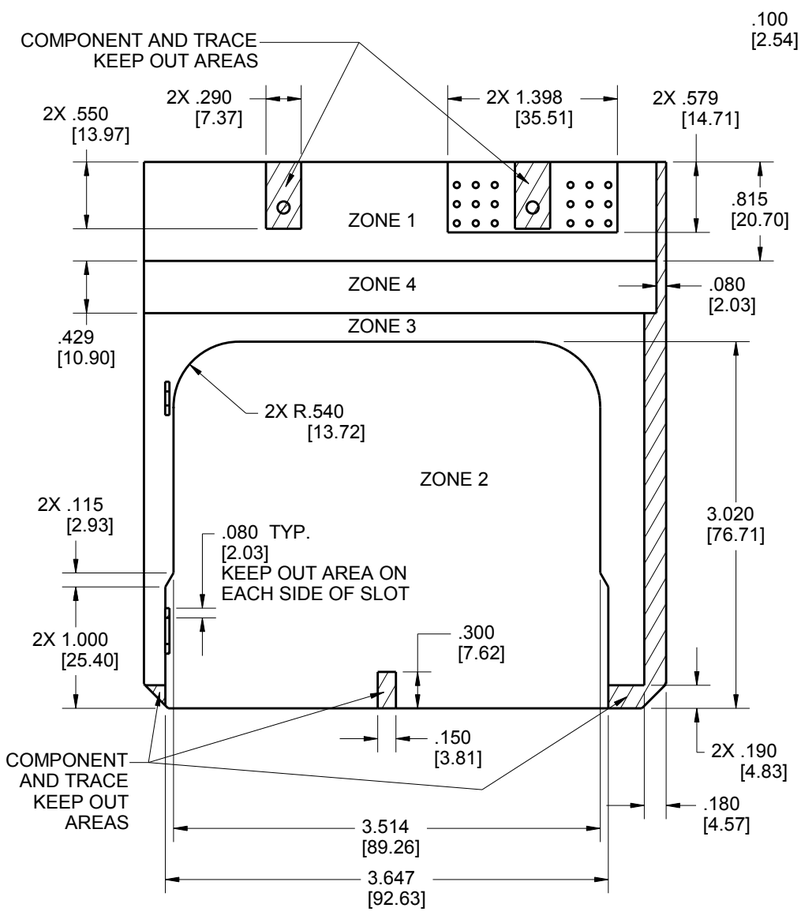
SIZE: B

SCALE: 4:5

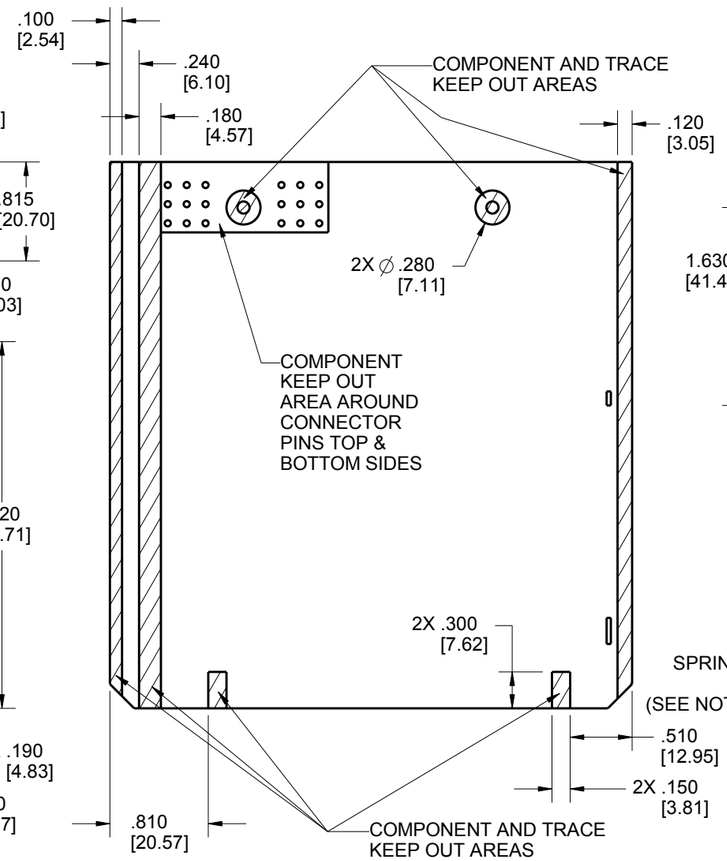
SHEET 4 OF 6

# PCB LAYOUT WITH ONE HEAT SINK

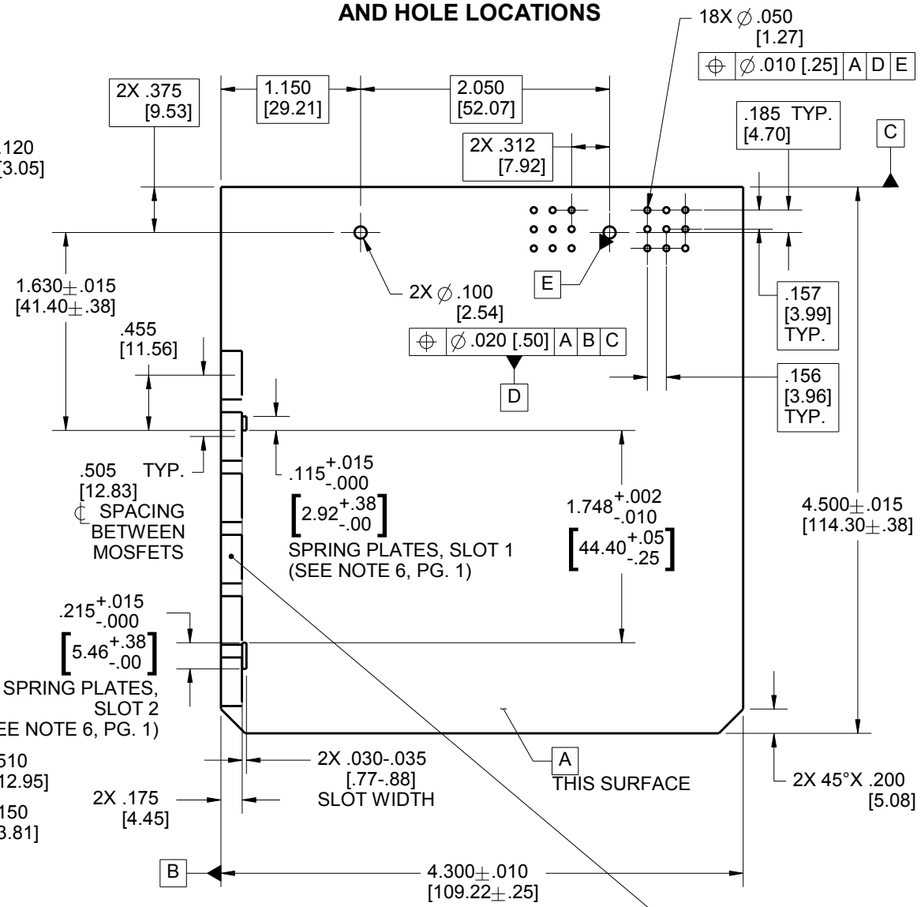
## PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

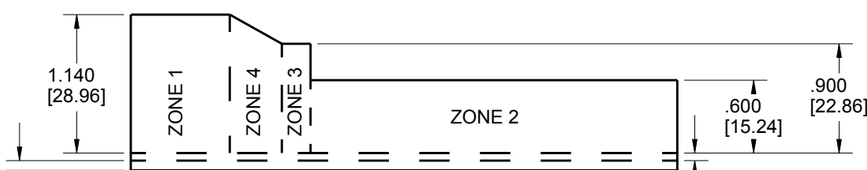



## PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS




## PCB OVERALL DIMENSIONS AND HOLE LOCATIONS




**PCB 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 4 |

PCB NOTES:

1. IF MOSFET SPRINGS ARE USED, ZONE 3 SHOULD CONTAIN ONLY MOSFETS AND TRACES BETWEEN THE SPRINGS AND EDGE OF THE BOARD.
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3. THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 6 SIDE VIEW).
4. 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/RADII .02 MAX

TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH

TOLERANCES .X ± .1 .XX ± .01 .XXX ± .005 ANGULAR ± .5°



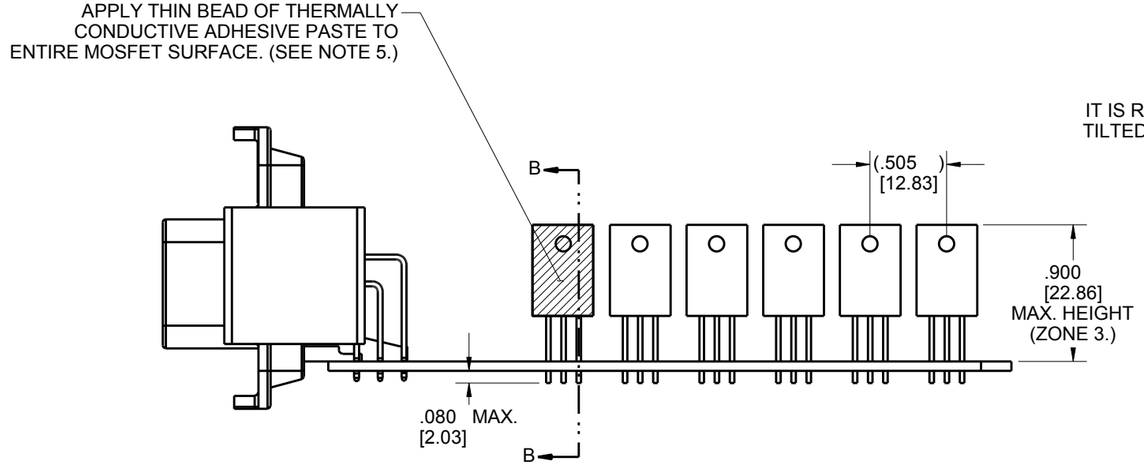
**CINCH**
1700 FINLEY RD
LOMBARD, IL. 60148

TITLE: 18-WAY HEADERS MODICE SE

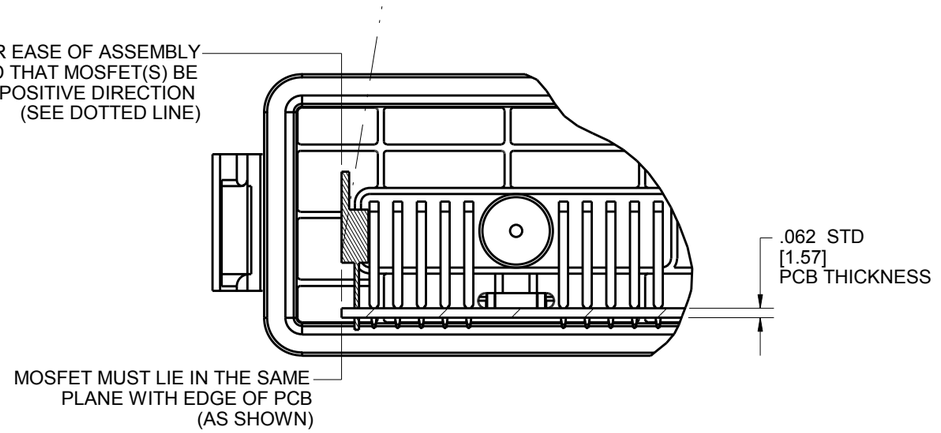
**PRO/E DRAWING**

| CAD FILE NUMBER | DRAWING NUMBER | REV |
|---|---|---|
| 5810118032S_HEADERS | 581 01 18 032 S | E |

| CAGE IDENT NO. | SIZE | SCALE | SHEET 5 OF 6 |
|---|---|---|---|
| 71785 | B | 4:5 | |




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




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

| | | | |
|---|---|---|---|
| UNITS ENGLISH | CINCH | 1700 FINLEY RD LOMBARD, IL. 60148 | |
| DO NOT SCALE DRAWING | TITLE: 18-WAY HEADERS MODICE SE | | |
| UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES<br>FILLET/RADII .02 MAX<br>TOLERANCES AND LIMITS APPLY OVER ADDITIVE FINISH<br>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: 5810118032S_HEADERS | DRAWING NUMBER: 581 01 18 032 S | REV: E |
| | CAGE IDENT NO.: 71785 | SIZE: B | SCALE: 1:1 |
| | | | SHEET 6 OF 6 |