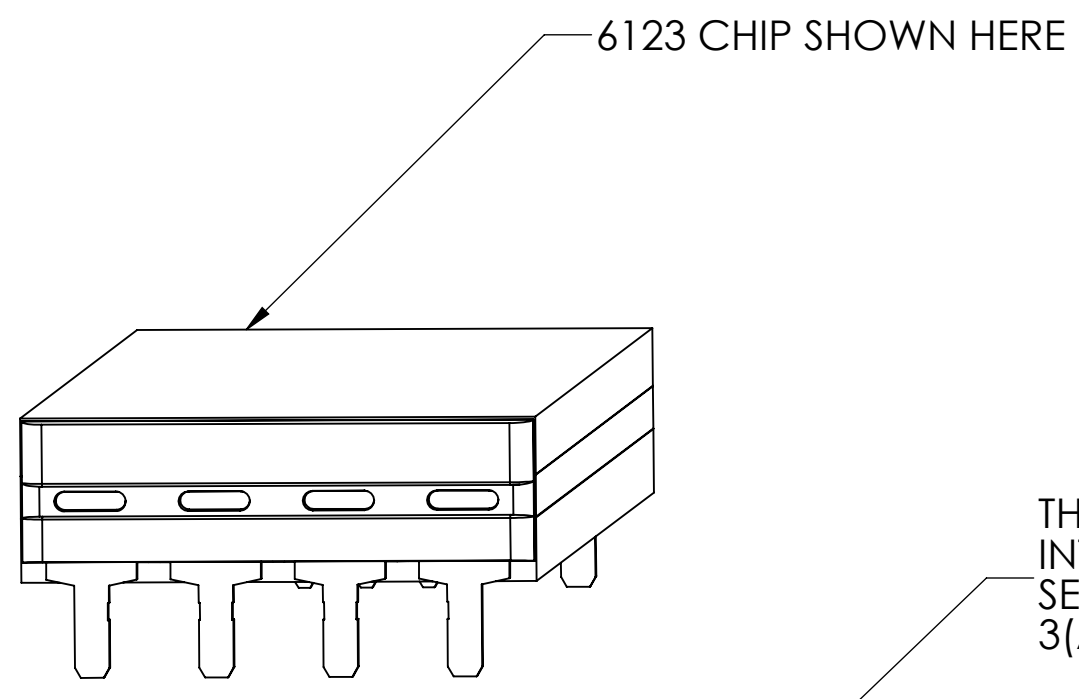
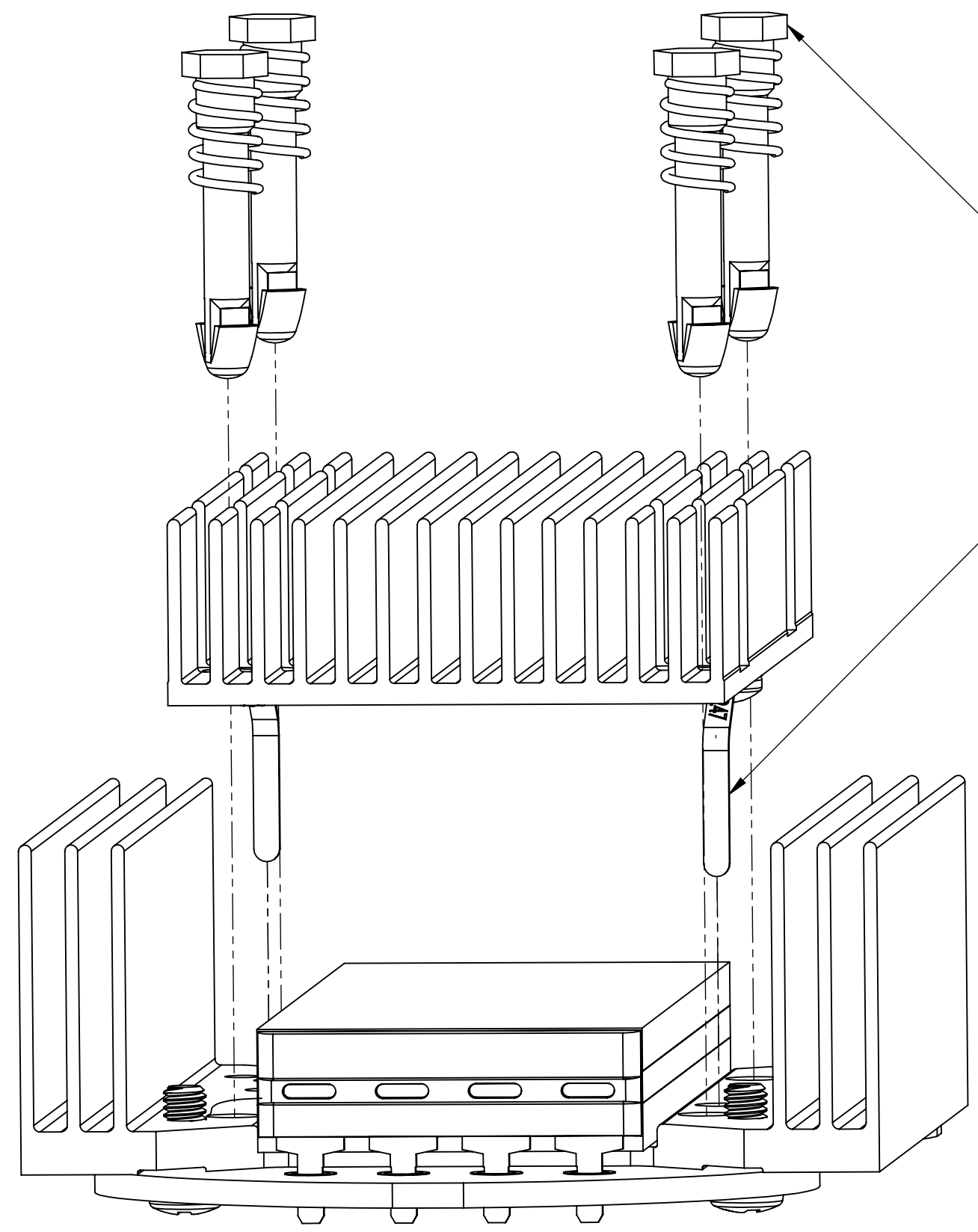


| REV. | DESCRIPTION | INTL | DATE | APVD |
|------|---------------------|------|------------|------|
| 1 | RELEASE PER E140060 | REJH | 01/17/14 | REW |
| 2 | REVISED PER E140151 | SR | 01/30/2014 | REW |
| 3 | REVISED PER E141039 | SJW | 09/03/14 | RH |



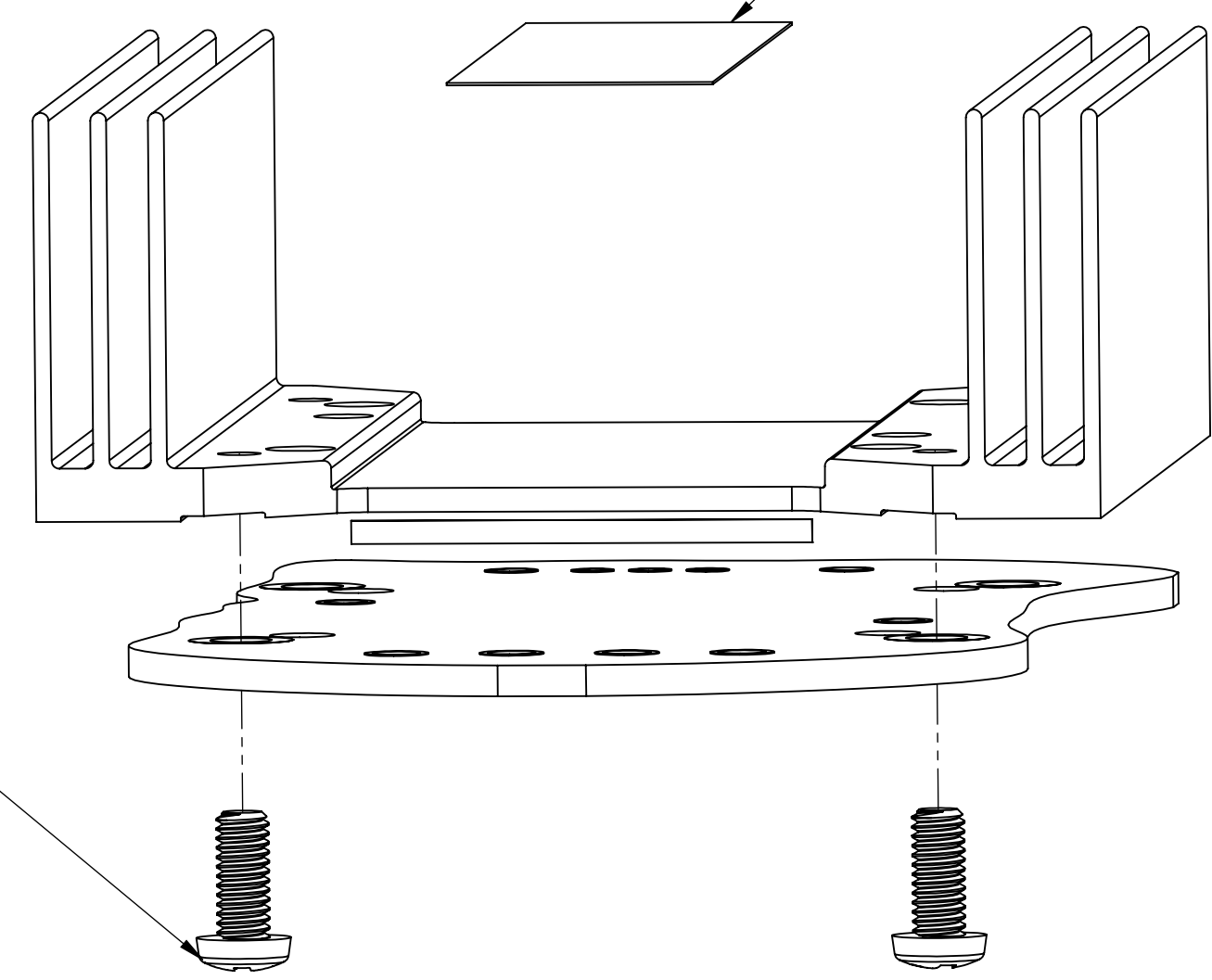
THERMAL INTERFACE
SEE NOTE 3(A) OR 3(B)



PUSH-PINS
SEE NOTE 3,4
AND SELECTION TABLE

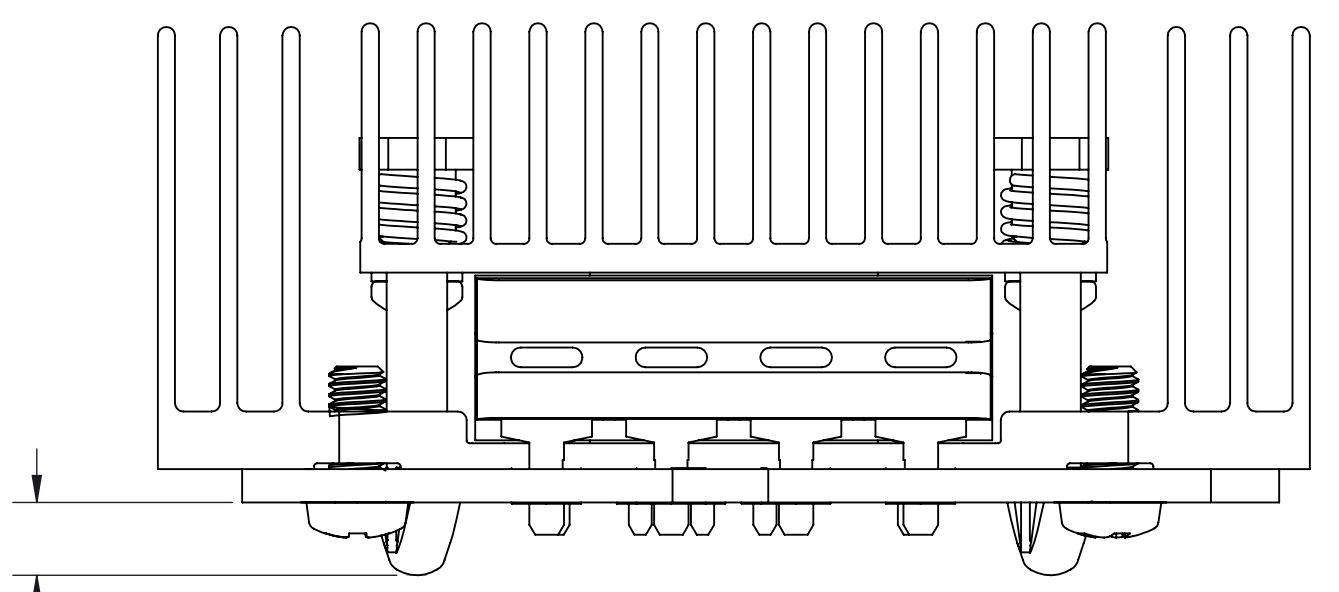
GROUNDING TABS
SOLDERED TO PCB
SEE NOTE 3

SCREW (40578)
INSTALLED FROM
BOTTOM SIDE OF PCB.
TORQUE TO 6 IN-LBS.
(2) PL.



**BOTTOM HEATSINK
APPLICATION
SEE NOTE 3**

**TOP HEATSINK
APPLICATION
SEE NOTES 3**



(3.20
[.126])

ASSEMBLED FRONT VIEW

NOTES:

- FOR PCB LAYOUT SEE VICOR APPLICATION DRAWING 40438.
- ROHS COMPLIANT PER CST-0001 LATEST REVISION.
- THE SOLDERING METHOD USED FOR CHIPS (AND OPTIONAL HEATSINK GROUNDING) IS IMPORTANT WHEN SELECTING A THERMAL INTERFACE MATERIAL (TIM). THE PHASE-CHANGE TIM SHOWN IN THESE ILLUSTRATIONS MAY BE DAMAGED BY TEMPERATURES OVER 125C, SO TWO ASSEMBLY PROCEDURES ARE DESCRIBED BELOW:
(A) FOR HAND-SOLDERING ONLY,
(B) FOR WAVE-SOLDERING AND/OR HAND-SOLDERING.

(A) PLACE BOTTOM-SIDE HEATSINK (WITH PRE-ATTACHED PHASE-CHANGE TIM) ON PCB. PLACE CHIP AND TOP-SIDE HEATSINK (WITH PRE-ATTACHED TIM AND GROUNDING TABS). WHILE SUPPORTING PCB, INSERT PLASTIC PUSH-PINS THROUGH BOTH HEATSINKS AND PCB. (SELECT PROPER PUSH-PIN LENGTH FROM TABLE ON THIS DRAWING.) IMPORTANT: TO SET FINAL THICKNESS OF PHASE-CHANGE TIM ENSURE THAT THE ENTIRE ASSEMBLY IS RAISED ABOVE 65C FOR SEVERAL MINUTES. HAND-SOLDER ALL CHIP AND GROUNDING PINS. ADDITIONAL SOLDERING IRON HEAT MAY BE REQUIRED TO COMPENSATE FOR LOSSES TO THE HEATSINKS.

(B) WAVE SOLDERING TEMPERATURES ARE UNSUITABLE FOR PLASTIC PUSH-PINS AND PHASE-CHANGE TIM, SO VICOR TIM 40325 (PARKER CHOMERICS GEL8010) IS RECOMMENDED. APPLY A UNIFORM .003" (.076MM) LAYER OF TIM 40325 TO THE TOP AND BOTTOM SURFACE OF THE CHIP, OR TO THE CORRESPONDING HEATSINK SURFACES. PLACE BOTTOM-SIDE HEATSINK, CHIP, AND TOP-SIDE HEATSINK ON PCB. WITH A CUSTOM FIXTURE APPLY APPROX. 10 LBS LOAD TO THE TOP-SIDE HEATSINK AND THEN WAVE-SOLDER ALL PINS. REMOVE FIXTURE AND INSERT PLASTIC PUSH-PINS THROUGH BOTH HEATSINKS AND PCB. (SELECT PROPER PUSH-PIN LENGTH FROM TABLE ON THIS DRAWING.)
- CARE SHOULD BE TAKEN TO AVOID FULLY COMPRESSING THE PUSH-PIN SPRING DURING INSTALLATION AS THIS WOULD EXPOSE THE CHIP TO FORCES GREATER THAN THE RECOMMENDED LIMIT OF 3.1 LBF (13.8 N) PER PUSH-PIN.

| | HEATSINK TYPE | P/N ASSY HEATSINKS, TIM AND GROUND TAB | P/N ASSY HEATSINK W/GROUND TAB ONLY |
|-------------------------------|---------------|--|-------------------------------------|
| SOLDERING METHOD (SEE NOTE 2) | - | 2(A) HAND SOLDER ONLY | 2(B) WITH VICOR 40325 THERMAL GEL |
| 4623 | DUAL 11MM | 40519 | 40527 |
| | DUAL 19MM | 40408 | - |
| 6123 | DUAL 11MM | 40520 | 40528 |
| | DUAL 19MM | 40409 | - |

HEATSINK OPTIONS

| PUSH-PINS W/ SPRINGS (100/BAG) | COLOR | PCB THK NOMINAL RANGE | PCB THK MINIMUM | PCB THK MAXIMUM |
|--------------------------------|-------|--|---------------------|---------------------|
| 32436 | BLUE | 1.143 MM TO 1.854 MM [.045"] TO [.073"] | 1.041 MM [.041"] | 2.057 MM [.081"] |
| 32437 | GRAY | 1.880 MM TO 2.438 MM [.074"] TO [.096"] | 1.676 MM [.066"] | 2.692 MM [.106"] |

PUSH-PIN SELECTION

| | | | |
|---|-------------------|---|---------------------------|
| DRAWN BY Robert Wasik | DATE 7/12/2013 | VICOR <small>swd</small> | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE: INCH / (MM) | | APP DWG, DUAL HEATSINK, 6123, 4623 | |
| TOLERANCES ARE: DECIMALS ANGLES X.XX (X.X) = +0.01 (0.25) ±1° X.XXX (X.XXX) = ±0.005 (0.127) | | SIZE D | CAGE CODE 67131 |
| THIRD ANGLE PROJECTION | | DWG NO 40191 | REV 3 |
| DO NOT SCALE DRAWING | | SCALE 3:1 | SHEET 1 OF 1 |