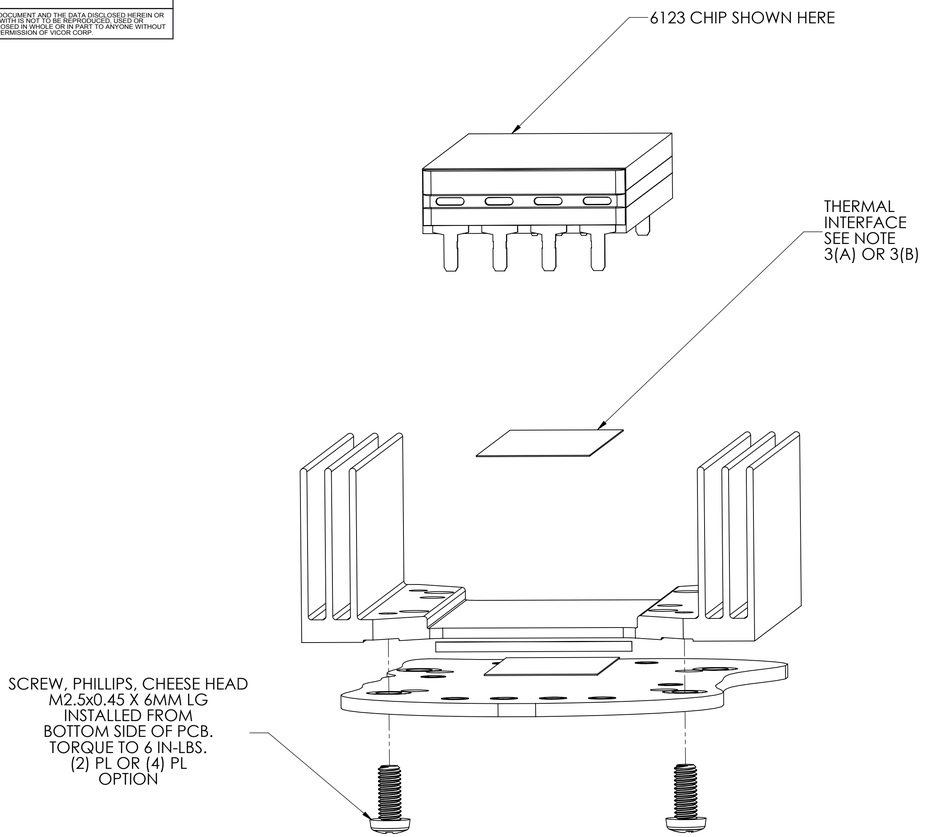
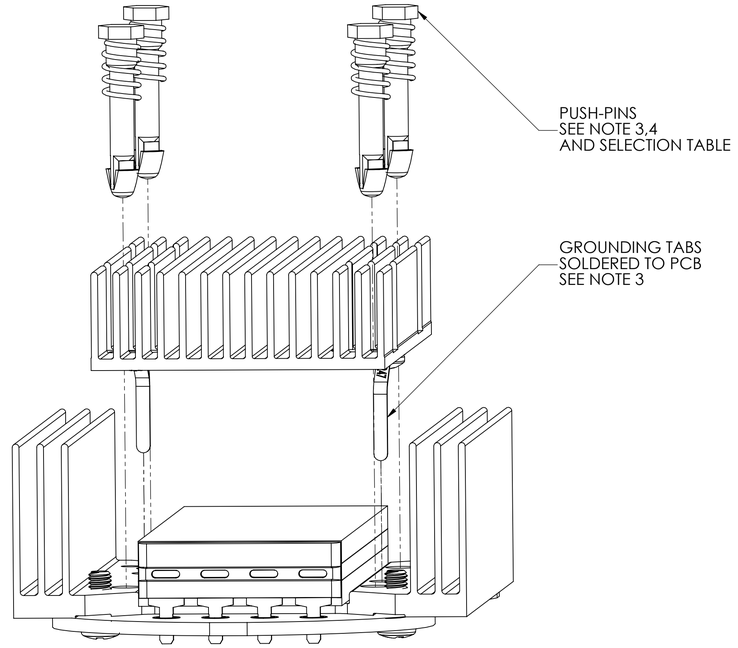
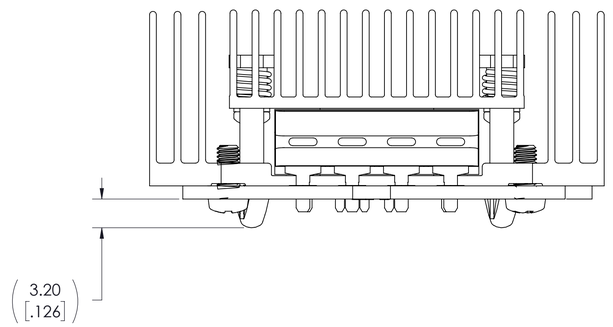
REV.	DESCRIPTION	INTL	DATE	APVD
1	RELEASE PER E140060	REJH	01/17/14	REW
2	REVISED PER E140151	SR	01/30/2014	REW
3	REVISED PER E141039	SJW	09/03/14	RH
4	REVISED PER E170887	JM	09/26/17	REJH
5	REVISED PER E200529	DKT	10/19/20	RLT



BOTTOM HEATSINK APPLICATION SEE NOTE 3



TOP HEATSINK APPLICATION SEE NOTES 3



ASSEMBLED FRONT VIEW

NOTES:

1. FOR PCB LAYOUT SEE VICOR APPLICATION DRAWING 40438.

2. ROHS COMPLIANT PER CST-0001 LATEST REVISION.

3. 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 PARKER CHOMERICS GEL8010 IS RECOMMENDED AS A TIM.
   APPLY A UNIFORM .003" (.076MM) LAYER OF TIM 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.)

4. 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	DATE
Robert Wasik	7/12/2013

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE : INCH / [MM]

TOLERANCES ARE:
DECIMALS ANGLES
X.XX [X.X] = ±0.01 [0.25] ±1°
X.XXX [X.XX] = ±0.005 [0.127]

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

VICOR SWD

APP DWG, DUAL HEATSINK, 6123, 4623

SIZE	CAGE CODE	DWG NO	REV
D	67131	40191	5

SCALE 3:1 SHEET 1 OF 1