

## NOTES:

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FOR PCB LAYOUT SEE VICOR APPLICATION DRAWING 39983.

- 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 CHIP AND TOP-SIDE HEATSINK (WITH PRE-ATTACHED TIM AND GROUNDING TABS) ON PCB. WHILE SUPPORTING PCB, INSERT PLASTIC PUSH-PINS THROUGH HEATSINK AND PCB. (SELECT PROPER PUSH-PIN LENGTH FROM TABLE ON THIS DRAWING.) HAND-SOLDER CHIP AND GROUNDING PINS.
  - (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 SURFACE OF THE CHIP, OR TO THE BOTTOM SURFACE OF THE HEATSINK. PLACE CHIP ON PCB AND TOP-SIDE HEATSINK ON CHIP. WITH A CUSTOM FIXTURE APPLY APPROX. 10 LBS LOAD TO THE TOP-SIDE HEATSINK AND THEN WAVE SOLDER ALL PINS. AND THEN WAVE-SOLDER ALL PINS. REMOVE FIXTURE AND, WHILE SUPPORTING PCB, INSERT PLASTIC PUSH-PINS THROUGH HEATSINK AND PCB. (SELECT PROPER PUSH-PIN LENGTH FROM TABLE ON THIS DRAWING.)
- 3. 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.
- 4. ROHS COMPLIANT PER CST-0001 LATEST REVISION.

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BOTTOM VIEW



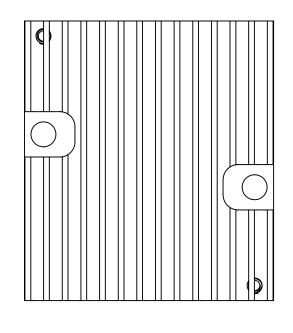
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PUSH-PINS W/ SPRINGS (100/BAG)	COLOR	PCB THK NOMINAL RANGE	PCB THK MINIMUM	PCB THK MAXIMUM
32434	WHITE	1.143 MM TO 1.422 MM [.045"] TO [.056"]	1.016 MM [.040'']	1.575 MM [.062'']
32435	BLACK	1.448 MM TO 2.311 MM [.057"] TO [.091"]	1.295 MM [.051'']	2.565 MM [.101'']
32436	BLUE	2.337 MM TO 3.023 MM [.092"] TO [.119"]	2.083 MM [.082'']	3.353 MM [.132'']
32437	GRAY	3.048 MM TO 3.607 MM [.120''] TO [.142'']	2.743 MM [.108'']	3.988 MM [.157'']

## **PUSH-PIN SELECTION**

	HEATSINK TYPE	P/N HEATSINK ONLY	P/N HEATSINK W/ TIM ONLY	P/N HEATSINK, TIM AND GROUND TAB	P/N HEATSINK W/GROUND TAB ONLY
SOLDERING METHOD (SEE NOTE 2)	_	2(B) WITH VICOR 40325 THERMAL GEL	2(A) HAND SOLDER ONLY	2(A) HAND SOLDER ONLY	2(B) WITH VICOR 40325 THERMAL GEL
0000	XF 11MM	39966	40488	40138	40478
2223 -	LF 11MM	39965	40489	40142	40479
3623 -	XF 11MM	39968	40490	40139	40480
	LF 11MM	39967	40491	40143	40481

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REV.	DESCRIPT	ION	INTL	DATE	APVD
1	RELEASED PER E1409	954a	SJW	10/30/14	RH



X-FLOW (XF) (HEAT SINK ONLY SHOWN)

LONG-FLOW (LF) (HEAT SINK ONLY SHOWN)

## HEATSINK SELECTION

		DR	SWD
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SIZE CAGE COI	DE DWG NO		REV
D 6713	1 4	<b>10112</b>	1
SCALE 2:1		SHEET 1 OF 1	
	TOPS   SIZE CAGE COI   D 6713'	APP DWG, CHI TOPSIDE HS, S SIZE CAGE CODE DWG NO D 67131 4	APP DWG, CHIP PUSHPIN TOPSIDE HS, 3623, 2223   SIZE CAGE CODE   D 67131

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