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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



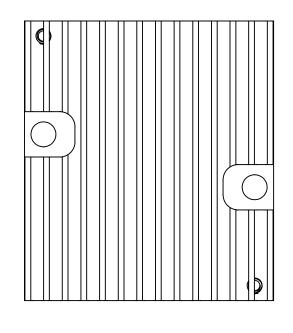
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|--------------------------------------|-------|--|----------------------|----------------------|
| PUSH-PINS W/ SPRINGS (100/BAG) | COLOR | PCB THK NOMINAL RANGE | PCB THK MINIMUM | PCB THK MAXIMUM |
| 32434 | WHITE | 1.143 MM TO 1.422 MM [.045"] 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 |
|---------------|--------------------------------|---|--|
| | | | |
| | • | | |
| SIZE CAGE COI | DE DWG NO | | REV |
| D 6713 | 1 4 | 10112 | 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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