NOTES:

1. FOR PCB LAYOUT SEE VICOR APPLICATION DRAWING 39983.

2. 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 125°C, 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 AND TOP-SIDE HEATSINK (WITH PRE-ATTACHED TIM AND GROUNDING TABS) 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, WHILE SUPPORTING PCB, INSERT PLASTIC PUSH-PINS THROUGH HEATSINK AND PCB. (SELECT PROPER PUSH-PIN LENGTH FROM TABLE ON THIS DRAWING.)

C. 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.