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REV.

DESCRIPTION

INTL

DATE

APVD

1

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SJW

10/30/14

RH

SEE NOTE 3
(2) PL.

OPTIONAL
GROUNDING TABS (40247) (2) PL.
SEE NOTE 3 AND DRAWING 39983

3623 CHIP SHOWN HERE

ISO ASSY REF ONLY

ISO ASSY REF ONLY

THERMAL
INTERFACE
MATERIAL

BOTTOM VIEW

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

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

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 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. 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.

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"]

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
	2223	XF 11MM LF 11MM	39966 39965	40488 40489	40138 40142
3623	XF 11MM LF 11MM	39968 39967	40490 40491	40139 40143	40480 40481

DRAWN BY

DATE

Robert Wasik

7/22/2013

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE: INCH / (MM)

TOLERANCES ARE:
DECIMALS ANGLES
XXX (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, CHIP PUSHPIN
TOPSIDE HS, 3623, 2223

SIZE

CAGE CODE

DWG NO

REV

D

67131

40112

1

SCALE

2:1

SHEET

1 OF 1

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