OPENCOTS 3U CONDUCTION- COOLED THERMAL LOAD BOARD MODULE

THE WAVETHERM 3U CONDUCTION-COOLED THERMAL LOAD-BOARD MODULE IS A COST-EFFECTIVE SOLUTION FOR THERMAL TESTING OF RUGGED OR MIL-SPEC ENCLOSURES AND SYSTEMS USING WEDGE LOCKS. THE PCB DESIGN PERMITS YOUR CHOICE OF EITHER PRIMARY OR SECONDARY SIDE WEDGELOCK POSITIONING FOR COMPATIBILITY WITH SYSTEMS USING EITHER WEDGELOCK LOCATION.

WAVETHERMS

VP



OC-CC-VPX-3U-5HP-SS-300-LB48V

FEATURES:

- COMPLIES TO VPX STANDARDS CUSTOMIZABLE HEAT PLATES
- MAX 100-138W DISSIPATED
- 5, 12, 24, 48 VOLTS AVAILABLE
- PRIMARY OR SECONDARY-SIDE
- WEDGELOCKS TWO TYPE T THERMOCOUPLES LOCATED IN HEATFRAME WITH LEADS ACCESSIBLE TO USER

SPECS:

- IEEE 1101.2
- VITA 48.2
- COMPACTPCI

KIT INCLUDES:

- HOST HEAT FRAME
- PCB LOAD BOARD
- PRIMARY OR SECONDARY SIDE
 HEAT FRAME
- PAIR OF SOLIDWEDGE CARD RETAINERS
- FIELD REPLACEABLE INJECTION / EJECTION HANDLES
- THERMAL INTERFACE MATERIALS
- ASSEMBLY HARDWARE
- 3D MODELS AVAILABLE

MATERIALS:

ALUMINUM 6061-T6

- ALL HEAT FRAMES
- ALL COVERS
- SOLIDWEDGE

OTHER MATERIALS AVAILABLE: COPPER ALUMINUM 6101-T6

OC-CC-VPX-3U-5HP-SS-300-LB48V

VITA 48.2

THE WAVETHERM 3U CONDUCTION-COOLED THERMAL LOAD BOARD MODULE IS PART OF THE OPENCOTS PORTFOLIO OF PRODUCTS INTENDED FOR ACCELERATED PRODUCT DESIGN AND REAL-WORLD QUALIFICATION TESTING OF 3U AND 6U CONDUCTION-COOLED SINGLE BOARD COMPUTERS. WAVETHERM'S OPENCOTS PRODUCTS FACILITATE FASTER TIME-TO-MARKET, REDUCE ENGINEERING ALLOCATIONS, AND MINIMIZE PRODUCTION FABRICATION COSTS.

OVERVIEW -

THERE ARE FOUR STANDARD VERSIONS DESIGNED FOR VOLTAGES OF 5 VDC, 12 VDC, 24 VDC, AND EACH DISSIPATING ~100-140 WATTS AT THE STATED VOLTAGE. HOWEVER, THE APPLIED VOLTAGE MAY BE REDUCED USING A VARIABLE POWER SUPPLY TO OBTAIN THE EXACT POWER DISSIPATION REQUIRED TO MEET THE TESTING REQUIREMENTS OF YOUR SYSTEM.

WAVETHERM-

THERE IS NO ELECTRICAL CONNECTION TO THE VME/VPX BACKPLANE; HOWEVER, VPX ALIGNMENT SOCKETS ARE INSTALLED. EACH BOARD IS POWERED VIA FOUR FRONT FORF WIRING CONNECTORS ALLOWING THE USER TO CHOOSE TO SUPPLY POWER FROM 1 TO 4 OF THE RESISTOR BANKS ON THE BOARD. THE RESISTORS ASSOCIATED WITH EACH BANK ARE DISTRIBUTED EVENLY ACROSS THE BOARD'S SURFACE SO THAT ANY COMBINATION OF BANKS CHOSEN WILL DISSIPATE ITS ENERGY EVENLY THROUGHOUT THE BOARD. THE LOAD BOARD IS MANUFACTURED WITH THE PROPER RESISTOR VALUES TO ALLOW IT TO OPERATE AT ONE OF THE FOUR STANDARD VOLTAGES: 5, 12, 24, OR 48 VDC. AT RATED VOLTAGE, THE BOARD WILL DISSIPATE 115 WATTS DE POWER. ANY VERSION OF THE LOAD BOARD CAN BE OPERATED AT A VARIABLE VOLTAGE UP TO THE NOMINAL RATED VOLTAGE TO ALLOW FOR FINE TUNING THE APPLIED HEAT LOAD IN THE UNIT UNDER TEST. GREEN LED'S INDICATE EACH BANK THAT IS POWERED AND THE POWER FOR EACH BANK IS ROUTED THROUGH A SLOW-BLOW FUSE TO PROTECT THE BOARD IN THE EVENT THAT AN INCORRECT, HIGHER VOLTAGE IS APPLIED.

- SECONDARY SIDE WEDGE LOCK
- PCB LAYOUT SHOWN ABOVE • PRIMARY SIDE WEDGE LOCK DESIGNS AVAILABLE
- OTHER FORM FACTORS AVAILABLE

SECONDARY SIDE WEDGELOCKS PCB LAYOUT





PART NUMBER BUILDER DC-CC-VPX-3U-5HP-SS-3DD-LB48

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SINGLE-BOARD COMPUTER MANUFACTURERS WHICH RELY ON WAVETHERM CAN IMPROVE THE THERMAL PERFORMANCE OF THEIR EMBEDDED COMPUTERS, SPEND MORE OF THEIR R & D DOLLARS ON RESOURCES FOR THEIR KEY VALUE-ADD, AND BE MORE FLEXIBLE TO THE NEEDS OF THEIR CUSTOMERS.



NO MEZZANINE CARD



SALES@WAVETHERM.COM



OPENCOTS 3U CONDUCTION- COOLED

THERMAL LOAD BOARD MODULE

WAVETHERN

ALL PCB ASSEMBLIES ARE VOLTAGE SPECIFIC. ORDER PCB ASSEMBLY BASED ON DC VOLTAGE. PCB ASSEMBIES AVAILABLE IN 5V, 12V, 24V AND 48V. NOTE: 24V PCB ASSEMBLY CAN OPERATE AT 28V ~ 138 WATTS