

# VPXtra® HU550LV1

### FEATURES

- Wide Input Range
- 1.2(a) Slot Pitch IAW VITA 62.0
- High Power DC Pass-Through
- High Efficiency
- Automatic Discharge of Storage Capacitors
- Hold-Up 550 Watts for 50 msec
- Conduction Cooled at Card Edge
- Conformal Coating on PCB
- Designed to Meet MIL-STD-704F Input Transient
- READY\* Signal Provides Status
- Designed to Meet MIL-STD-704F Input Transient Performance



### 3U VPX Energy Storage (Hold-Up) Card

The Behlman VPXtra®HU550LV1 COTS energy storage card is a rugged, highly reliable, conduction cooled, unit built for high-end industrial and military applications. The VPXtra®HU550LV1 is a 3U VPX hold-up card that accepts 28VDC input IAW MIL-STD-704F and supports up to 40 amperes of continuous pass-through current while providing sufficient energy storage to hold-up 550 Watts of DC power for 50 msec. The VPXtra®HU550LV1 is expressly designed for use with Behlman's VPXtra®500, VPXtra®700 and VPXtra®800 series 3U DC-DC power supplies.

This energy storage card is designed to support the rigors of mission critical airborne, shipboard, vehicle and mobile applications.

Designed and manufactured with *Xtra-Cooling*, *Xtra-Reliable* Design and *Xtra-Rugged* construction makes the Behlman VPXtra®HU550LV1 your best choice.

#### INPUT

**Voltage:** 28 VDC (18-36 VDC)

#### OUTPUT:

**Voltage:** 18-36 VDC (pass-through)  
**Current:** 40 Amps @ 85°C Rails  
**Hold-up Time:** 50 msec @ 550W Output  
**Charging Time:** 350 msec max  
**Discharge Time:** Voltage at any connector pin shall be 30 V or lower 30 seconds after removing input power

#### PROTECTIVE CIRCUITS

**Undervoltage:** Inhibits charging operation only for source voltage less 21VDC; disables pass-through operation for source voltage less than 17VDC

**Overtemperature:** Shutdown w/Auto Recovery  
**Reverse Polarity:** -36VDC (indefinite application)  
**Overvoltage:** Shutdown w/Auto Recovery

#### INDICATORS

**CHARGE STATUS:** Bi-color LED (Red/Green)  
**OVERTEMP:** Red LED

#### STATUS SIGNALS

**READY\*:** Output, active low indicates internal storage elements are fully charged

### GENERAL CHARACTERISTICS

#### Isolation:

Input to Case: 500 VDC

Output to Case: 500 VDC

Signal to Case: 500 VDC

MTBF: 319,796 hrs, G<sub>F</sub> @ 55°C

IAW MIL HDBK-217F Notice 2

### MECHANICAL (1.2 inch pitch)

See O&C drawing OC94097-1 for connector details and pin assignment

Dimensions: 3.94"W x 6.63"L x 1.16"H

Weight: 1.8 lbs. maximum

Connector: TE P/N: 2317477-1

### ENVIRONMENTAL COMPLIANCE

(IAW VITA 47.1 Class ECC4SL1)

#### Temperature

Operating: -40°C to +85°C

Storage: -55°C to +105°C

Altitude: -1,500 to +60,000 ft.

#### Designed to meet the following:

Shock: VITA 47.1 Class OS2

Vibration: VITA 47.1 Class V3

EMI: MIL-STD-461G (Aircraft) \*

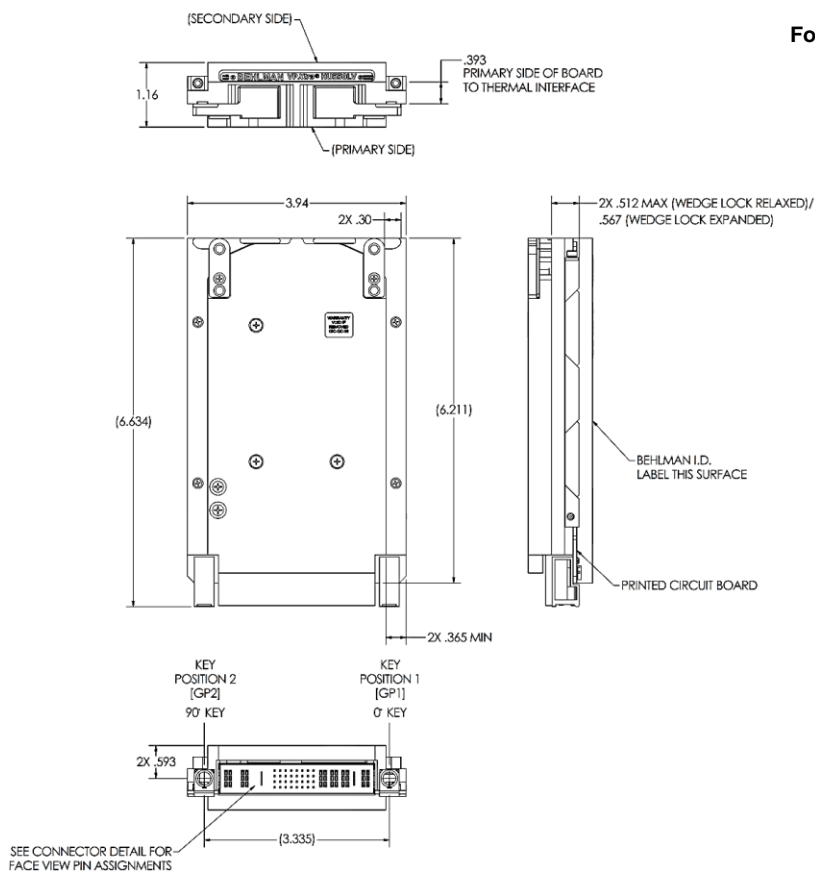
Humidity: VITA 47.1, up to 95% RH

Salt Fog: VITA 47.1, Class SL1

MIL-STD-704F: Including operation through normal transients

\* External EMI filter required

For more detail see VPXtraHU550LV1.DS Data Sheet



VITA Member

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