Behlman Power Products

VPXtra

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 VP*Xtra*®HU550LV1 COTS energy storage card is a rugged, highly reliable, conduction cooled, unit built for high-end industrial and military applications. The VP*Xtra*®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 VP*Xtra*®HU550LV1 is expressly designed for use with Behlman's VP*Xtra*®500, VP*Xtra*®700 and VP*Xtra*®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 VP*Xtra*®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

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GENERAL CHARACTERISTICS

Isolation:

Input to Case: 500 VDC
Output to Case: 500 VDC
Signal to Case: 500 VDC
MTBF: 319,796 hrs, G_F @ 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:** 1.60 lbs. maximum

Mating Connector: TE Connectivity 2309390-1 or similar IAW VITA 62.0

(SECONDARY SIDE)

393
PRIMARY SIDE OF BOARD
TO HERMAL INTERFACE

ENVIRONMENTAL COMPLIANCE

(IAW VITA 47.1 Class ECC4SL1)

Temperature

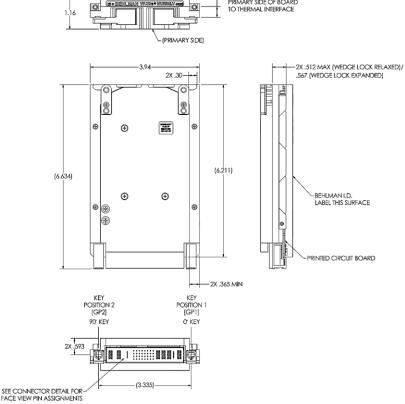
Operating: -40°C to +85°C Storage: -55°C to +105°C Altitude: -1,500 to +70,000 ft.

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

For more detail see VPXtraHU550LV1.DS Data Sheet







VITA Member

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^{*} External EMI filter required