

FEATURES

- Open VPX VITA 62 compliant
- Wide input range
- High power DC output
- Efficiency of 90% typical
- Conduction cooled at card edge
- Conformal coating on PWA

**3U Open VPX VITA 62 High Power Multi-Output Power Supply**

The Behlman VPXtra®650M COTS DC to DC power supply is a rugged, highly reliable, conduction cooled, switch mode unit built for high-end industrial and military applications. The VPXtra®650M is a VITA 62, Open VPX compliant, 3U power supply that delivers 655 Watts of DC power via six outputs. All outputs may be paralleled for higher power, with the +12V, +3.3V and +5V main outputs offering active load sharing. The VPXtra®650M can accept a 28 VDC input, IAW MIL-STD-704, and can supply a high-power DC output at various power levels.

The VPXtra®650M power supply has no minimum load requirement and has overvoltage and short circuit protection as well as over current and thermal protection. The power supply 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®650M your best choice.

INPUT

Voltage: 18 to 36 VDC

OUTPUT

Power: 655 Watts

Voltage/Current:

VS1 12 VDC +/- 1% @ 30 Amps

VS2 3.3 VDC +/- 1% @ 25 Amps

VS3 5 VDC +/- 1% @ 40 Amps

Auxiliary: 3.3 VDC +/- 1% @ 1 Amp

Auxiliary: -12 VDC +/- 1% @ 0.375 Amps

Auxiliary: +12 VDC +/- 1% @ 0.375 Amps

Line Regulation: 0.5% maximum

Load Regulation: 2.0% maximum (0-100%)

PARD-Ripple & Noise: 50mV p-p (0-20 MHz) for 3.3V and 5V outputs.

120mV p-p for 12V and +12/-12V auxiliary outputs.

Efficiency: 90% typical, 50% load
87% typical, 100% load

PROTECTIVE CIRCUITS

Over Voltage: 120% typical

Over Current: 120% typical

Short Circuit: Automatic recovery

Over Temp: Shutdown

CONTROLS (IAW VITA 62)

Inhibit: Output Off- active low

Enable: Input On- active low

INDICATOR

DC STATUS LED: Bi-color LED (Red/Green)

GENERAL CHARACTERISTICS

Isolation:

Input to Output: 500 VDC

Input to Case: 500 VDC

Output to Case: 500 VDC

MTBF: 132,740 hrs G_F @ 55°C,
IAW MIL HDBK-217F Notice 2

ENVIRONMENTAL

Temperature at card edge (IAW VITA 47)

Operating: -40°C to +85°C

Storage: -55°C to +105°C

MECHANICAL (1.0 inch pitch)

See O&C drawing OC94100 for connector details
and pin assignment

Dimensions: 3.94"W x 6.63"L x .97"H

Weight: 1.8 lbs. maximum

Connector: TE P/N: 6450849-7

COMPLIANCE

EMI (MIL-STD-461): CE102

Designed to meet the following:

MIL-STD-1275E (not including low voltage cranking
operation)

MIL-STD-461: CS101, CS114, CS115, CS116 & RS101

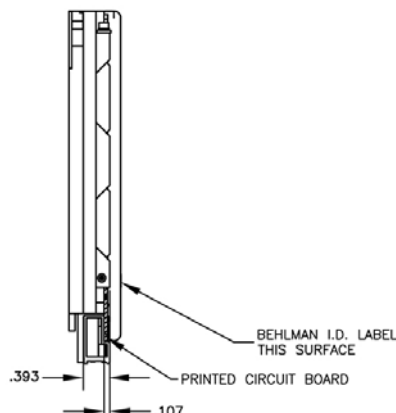
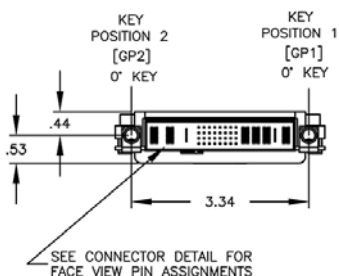
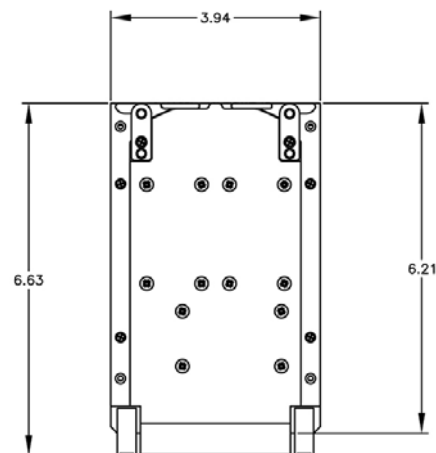
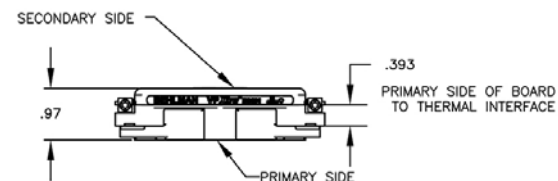
MIL-STD-810: Rapid Decompression, Corrosion
Resistance, Fungus Resistant, Altitude

MIL-STD-810 for the following IAW:

Shock: VITA 47 Class OS2

Vibration: VITA 47 Class V3

Humidity: VITA 47



For more details see VPXtra650M.DS Data Sheet



VITA Member

www.behlman.com

ORBIT POWER GROUP
Behlman Electronics

Headquarters:
80 Cabot Court, Hauppauge, NY 11788
631 435-0410 800 874-6727
Fax: 631 951-4341

sales@behlman.com

