

POWER CONVERSION PRODUCTS	Airborne Series
----------------------------------	------------------------

Part No.: VTA03076-00

16-40Vin / 5Vout Power Supply

FEATURES

- ❑ Up to 15 Watts Output Power
- ❑ RTCA DO-160C Environmental & Power Specifications
- ❑ MIL-STD-704A Power Transient Specifications
- ❑ High Input/Output Isolation
- ❑ 50 ms, Half Load O/P Hold-up Capability
- ❑ Continuous Short Circuit Protection
- ❑ Input Reverse Polarity Protection
- ❑ Thermal Protection

This Power Supply designed for low power, airborne applications, features a low profile package of 4.60" L x 1.495" W x 1.75" H or 1.25Watt/in³. It has excellent load regulation, input transient suppression, low output ripple as well as current limiting/thermal shutdown protection.

Input Specifications:

Steady State Voltage	16 to 40 Vdc
Surge Voltage	80 V for 50 ms
Hold Up Time	50 ms @ 1.5A Load
Softstart	Auto restart < 10 ms after power failure
Isolation (input/output to chassis).....	> 10 megohm @ 500 Vdc
Transient Protection (600V)	RTCA DO-160C / MIL-STD-704A
Operating Temperature	-40 to +80°C @ Case

Output Specifications:

<u>Nominal</u> <u>Voltage</u>	<u>Maximum</u> <u>Current</u>	<u>DC</u> <u>Regulation</u>	<u>Ripple</u> <u>& Noise</u>	<u>Maximum</u> <u>Power</u>
+ 5 VDC	3 A	± 3%	< 150 mVp-p	15W

Output Specifications:

Current Limiting/Short Circuit	Yes
Output Hold-up Time	50 ms at +20°C @ 1.5Amp
.....	25 ms at -40°C @ 1.5Amp

Operational Features:

Power Fail Detect	Active Low TTL signal for Vin < 15 VDC
Input Current Protection.....	Non-resetable Fusible-Resistor

Physical Specifications:

Weight	< 0.5 lbs or 227 gr
Case	Alluminum alloys
Finish.....	Allodyne chemical film
Mounting Position.....	Any orientation
Cooling Method	Conduction cooling via 1.495" x 4.6" mounting surface.
Connections	I/O: Solder pig-tail feed-through pins

Environmental Specifications:

Shock.....	Half sine wave, 40 g, 11 ms. (3 axis)
Vibration.....	RTCA/DO-160D, Sect 8, Cat U
Temperature, Operating	-40 to +80°C
Temperature, Storage	-55 to +125°C
Altitude.....	RTCA DO-160C, Cat C2 +50,000 ft.
Humidity.....	RTCA/DO-160C, Section 6, Category A
RF Susceptibility	RTCA/DO-160C, Section 20
RF Emissions.....	RTCA/DO-160C, Section 21
Lightning Susceptibility	RTCA/DO-160C, Section 22

Predicted Reliability (MIL-HDBK-217)..... > 50,000 hours A_{RW} @ 55°C

Viable Power Conversion Technologies Inc.

2044 St. Regis Boul.
Dorval, Quebec, Canada
H9P 1H6

Tel: (514) 684-4141
Fax: (514) 684-1276
Web: www.viablepower.com