SPECIFICATION

300W ATX 1U Narrow Body Industrial Grade Power Supply

Model: P6300P-48 1U

Specification subject to change without prior notice unless we have a written agreement.

3261 Keller St. Santa Clara, CA 95054 Tel: 408-980-9813

Fax: 408-980-8626

E-mail: info@topmicro.com

Confidential Specification

1. Input Characteristics

- 1.1 Input Voltage Range ----- -38Vdc To –72Vdc,
- 1.2 Input Dc Current (Max) ----- 11.0A Max. Full Load.

2. Output Characteristics

2.1 Static Output Characteristics.

Output		Load Range		Regu	ılation	Ripple Max	Ripple & Noise
	Voltage	Min.	Max.	Min.	Max.	mV P-P	Max. mV P-P
1.	+3.3 V	0.3 A	22.0 A	- 5 %	+ 5 %	50 mV	100 mV
2.	+5.0 V	2.5 A	30.0 A	- 5 %	+ 5 %	50 mV	100 mV
3.	+12.0 V	0.5 A	11.0 A	- 5 %	+ 5 %	100 mV	150 mV
4.	-5.0 V	0.0 A	1.0 A	- 10 %	+ 10 %	150 mV	200 mV
5.	-12.0 V	0.0 A	1.0 A	- 10 %	+ 10 %	150 mV	200 mV
6.	SB +5.0 V	0.0 A	1.5 A	- 5 %	+ 5 %	100 mV	100 MV

Note:

- 1. Noise Test ---- Noise Bandwidth Is From Dc To 20MHz.
- 2. Ripple Frequencies Greater Than 1 MHz Shall Be Attenuated By the Measurement System.
- 3. Add 0.1uF / 10uF Capacitor At Output Connector Terminals For Ripple & Noise Measurements.
- Combined Total Power From +3.3V And +5V Rails Shall Not Execeed 160W
- 5. The Total Output Power Shall Not Exceed 300W...
- 2.2 Dynamic Output Characteristics:
 - 2.2.1 Rise Time ---- 100 ms Max. At Nominal Line Full Load.
 - 2.2.2 Turn-on Delay Time ---- 600mS Max. At Nominal Line Full Load.
 - 2.2.3 Hold-up Time ---- 16 ms Min. For + 5V Output At Nominal Line Full Load.
 - 2.2.4 Transient Overshoot ----- 10% Max. Of Delay State After Load Change Of 25% Within The Range Of 50% To 100% Of Full Load.
 - 2.2.5 Temperature Coefficient ---- 0.03% Per °C Max.

3. Protections

- 3.1 Over Voltage Protection --- Standard On +3.3V Output Set At 4.10Vdc At +/-0.40Vdc. +5.0V Output Set At 6.25Vdc At +/-0.75Vdc. +12.0V Output Set At 14.6Vdc At +/-1.0Vdc.
- 3.2 Short Circuit Protection --- A Short Circuit Placed Between Dc Return And Output Shall Cause No Damage And The Power Supply Shall Shutdown.
- 3.3 Over Power Protection --- The Power Supply Can Use Electronic Circuit To Limit The Output. Power Against Excessing +150% Of Full Load. Or Protected against Excessive Power Delivery Due To Short Circuit Of Any Output Or Over Total Power.
- 3.4 No load Operation --- No Parts Damaged On Power Supply.

4. Dielectric Withstand Voltage

- 4.1 Primary to Secondary --- 1500Vac For 1 Minute. Or 1800Vac For 1 Sec.
- 4.2 Primary to Safety Ground --- 1500Vac For 1 Minute. Or 1800Vac For 1 Sec.
- 4.3 Insulation Resistance --- Primary To Safety Ground 500Vdc, 50M ohms Min.

5. Environment

- 5.1 Operation Temperature ----- Air Temperature 0 °C To 50 °C.

 5.2 Operation Relative Humidity ------ 20% To 90%.
- 5.3 Storage Temperature ----- Air Temperature -20 $^{\circ}\text{C}$ To 60 $^{\circ}\text{C}$.
- 5.4 Storage Relative Humidity ----- 5% To 95%.
- 5.5 Altitude ----- Operate Properly At Any Altitude Between 0 To 100,000 Feet. Storage 40,000 Feet.
- 5.6 Vibration ------ 0.38mm. 5-55-5Hz, 1 Minutes Per Cycle; 30 Minutes For Each Axis (X,Y,Z).

6. Burn-In

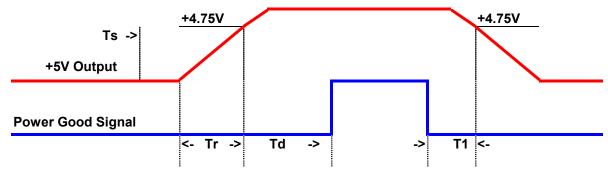
- 6.1 Burn-In ----- At 45 °C, Max. Load, 4 Hours.
- **7. Mean Time Between Failure** ------150 KHrs Minimum At Full Load For 25 °C Ambient Temperature.

8. Product Safety:

This Power Supply Is Designed Can Meet The Following Spec.

- 8.1 UL/CUL ----- UL1950
- 8.2 TUV ----- EN 60950

9. Power-Good Signal



Note: Tr \leq 100 ms, T1 \geq 1 ms, Td = 100 - 500 ms.

10. Dimension

10.1 W x H x D ----- 100.0 x 40.6 x 218.25 (mm)

