SWITCHING POWER SUPPLY SPECIFICATION

CP-04050

CLAYPOWER COMPANY

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1.Input Characteristics:

1.1 Input Voltage Range ----------90To264Vac Full Range,
With Active PFC,PF=90%Min

1.2 Input Frequency Range ----------47Hz To 63Hz.

1.3 Input Ac Current (Max) ----------10A Max. @115Vac, 5A Max. @230Vac Full Load.

1.4 Inrush Current ----------At 132Vac / 264Vac, Full Load Condition, No Damage Occur. Input Fuse Shall Not Blow.

1.5 Efficiency ----------70% Min, At Nominal Line Input Full Load.

1.6 Input Leakage Current ----------Leakage Current From Line to Ground Will Be Less 3.5mA rms. Measurement Will Be Made At 240Vac/60Hz.

2.Output Characteristics:

2.1 Static Output Characteristics.

Output Voltage	Load Range Min.	Load Range Max.		Regulation Min.	Regulation Max.	Ripple Max mV P-P	Ripple & Noise Max. mV P-P
1. +3.3 V	0.2 A	40.0 A		- 5 %	+ 5 %	50 mV	100 mV
2. +5.0 V	2.5 A	50.0 A		- 5 %	+ 5 %	50 mV	100 mV
3. +12.0 V	0.5 A	32.0 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	3.0 A		- 10 %	+ 10 %	150 mV	200 mV
6. SB +5.0 V	0.0 A	2.0 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.

4. Combined Total Power From +3.3V And +5V Rails Shall Not Exceed 250W.

5. The Total Output Power Shall Not Exceed 500W.

2.2 Dynamic Output Characteristics:

2.2.1 Initial Delay Time ----- 35mS Max. At Nominal Line Full Load.
2.2.2 Rise Time ---- 100 mS Max. At Nominal Line Full Load.
2.2.3 Turn-on Delay Time ----- 600mS Max. At Nominal Line Full Load.
2.2.4 Hold-up Time ----- 20mS Max. For + 5V Output At Nominal Line Full Load.

2.2.5 Transient Overshoot ----- 10% Max. Of Delay State After Load Change Of 25% Within The Range Of 50% To 100% Of Full Load.
2.2.6 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.ELECTROMAGNETIC COMPATIBILITY

5.1 Electromagnetic Interference (EMI) :

a.FCC Part 15,subject j, class B.
b.EN55022 (CISPR 22), class B.
c.VCCI Class “ 2 “.

5.2 Electrostatic Discharge (ESD) / 8KV :

Comply with IEC 801-2 (1984).

5.3 Radio-Frequency Electromagnetic Field (RS) :
Comply with IEC 801-3 (1984).

5.4 Harmonics Current :
Comply with EN61000-3-2.

5.5 Fast Transient Burst (EFT) / 2KV :

Comply with IEC 801-4 (1988).

6.Product Safety: This Power Supply Is Designed Can Meet The Following Spec.

6.1 UL/CUL ---------- UL60950

6.2 TUV ---------- EN 60950

7.Environment:

7.1 Operation Temperature ---------- Air Temperature 0 ◦C To 50 ◦C.

7.2 Operation Relative Humidity ---------- 20% To 90%.

7.3 Storage Temperature ---------- Air Temperature -20 ◦C To 60 ◦C.

7.4 Storage Relative Humidity ---------- 5% To 95%.

7.5 Altitude ---------- Operate Properly At Any Altitude Between 0 To 100,000 Feet. Storage 40,000 Feet.

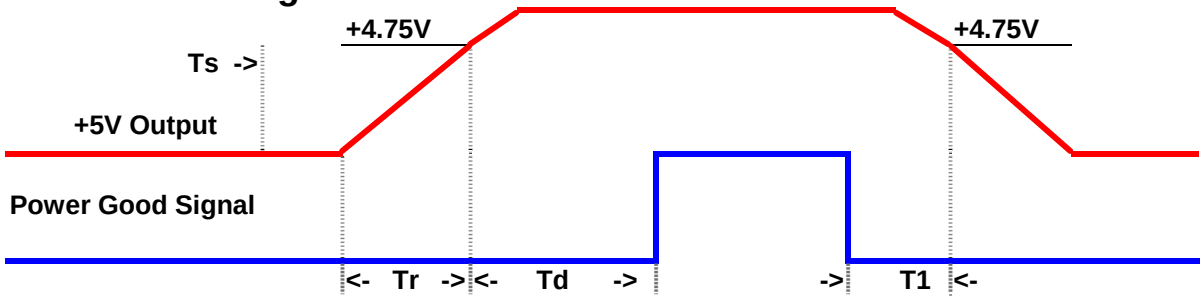
7.6 Vibration ---------- 0.38mm. 5-55-5Hz, 1 Minutes Per Cycle; 30 Minutes For Each Axis (X,Y,Z).

8.Burn-In

8.1 Burn-In ---------- At 45 ◦C, Max. Load, 4 Hours.

9.Mean Time Between Failure ---------- 50 KHrs Minimum At Full Load For 25 °C Ambient Temperature.

10.Power-Good Signal:



Note: Tr ≤ 100 ms, T1 ≥ 1 ms, Td = 100 - 500 ms.

11.Dimension

11.1 W x H x D ---------- 150.0 x 86.0 x 140.0 (mm)

Note: See The Mechanical Drawing.