



TECHNOLOGY
DELIVERED

Product Specification

SWITCH MODE POWER SUPPLY

PART NO.: 18VDC1600F/1

(MODEL: PS30IBIAK1600A)



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1. PRODUCT DESCRIPTION 产品描述:

1.1 INTRODUCTION OF S.M.P.S 电源供应器的描述

This is an off-line flyback switching mode power supply.

这是一个离线式反激开关电源供应器

It 's a current PWM mode power supply.

它是一个电流模式电源供应器

Switch frequency/开关频率: 60KHz(Typ.),full frequency/满载频率:100%,
half frequency/半载频率:50%.

2.ELECTRICAL CHARACTERISTICS 电气规格:

2.1 INPUT REQUIREMENTS 输入要求

Regular input voltage/额定输入电压: AC 100-240V

Operating voltage range/工作电压范围: AC 90-264V

Rating frequency/额定输入频率: 50 Hz/60 Hz

Frequency range/频率范围: 47 Hz-63 Hz

Input current/输入电流: 0.8Arms MAX (at regular output voltage & rating output current)

输入最大电流0.8A(额定输出电压及输出电流)

2.2 OUTPUT ELECTRICAL SPECIFICATIONS 输出性能描述

Unload output/空载最大输出:18.9VDC Max.

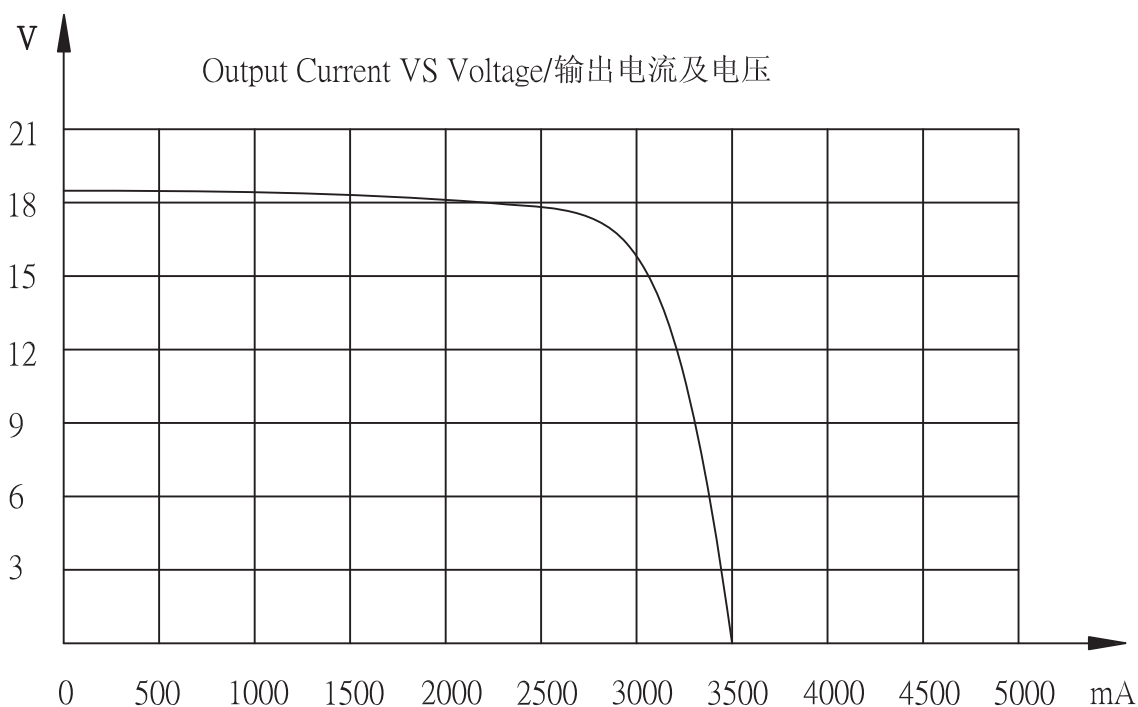
Rated output/额定负载输出电压:18.0VDC $\pm 5\%$.

Rated current/额定电流:1600mA.

Rated power/额定功率:28.8W.

Over current protection/过流保护:3.5A Max(Input voltage AC 240V).

Typical output characteristics (for Ref.)典型输出特性



REMARK/备注:

rating.load额定负载=1600mA Min.load最小负载=0mA

2.3 RIPPLE & NOISE 纹波及噪声

Ripple & noise voltage/输出纹波及噪声: $<120\text{mVp-p}$

Test condition: tested by DC loading parallel with a $10\mu\text{F/EC}$ and $0.1\mu\text{F/CC}$ capacitor and measured band-width with DC-20MHz.

测试条件: 测试时在输出端并联一个 $10\mu\text{F}$ 的电解电容和一个 $0.1\mu\text{F}$ 的瓷片电容, 标准测试频带DC-20MHz.

(Noise test distance by 30cm/噪音检测离电源本体30cm距离无异响)

2.4 TURN ON TIME 启动时间

Load/负载: rating load/额定负载.

AC switch on time/交流电接通时间: $T_{\text{start}} \leq 3\text{Sec.}$

2.5 DC OUTPUT RISE TIME 直流输出爬升时间

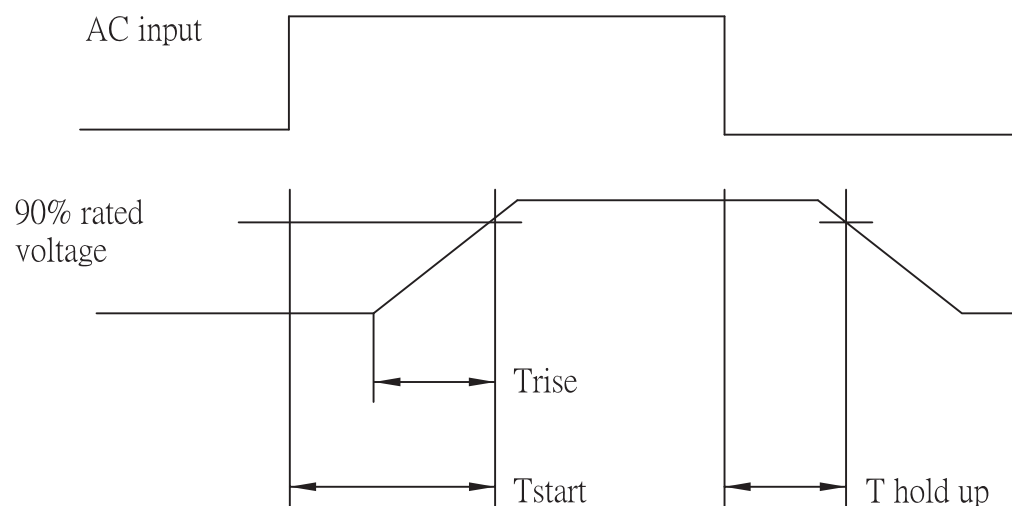
Load/负载: Max.load /最大负载.

DC output rise time/直流电输出爬升时间: $T_{\text{rise}} \leq 120\text{ms.}$

2.6 HOLD UP TIME 关机维持时间

Load/负载: rating.load/额定负载.

DC output hold up time/关机维持直流电输出的时间: hold up time $\geq 3\text{ms@}240\text{Vac input.}$



3. ENERGY EFFICIENCY 效率

3.1 NO POWER CONSUMPTION 空载功率消耗

No power consumption 0.3W Max(at 230VAC).

这个电源供应器在230VAC输入时最大空载功耗0.3W.

3.2 Full load efficiency/满载工作效率: $>80\%$.

3.3 Average efficiency can reach energy star V standard(83.24%)/

平均效率可达到能效五级标准(83.24%).

4. 安规要求及可靠性

4.1 ENVIRONMENTAL REQUIREMENTS 环境要求

Operating temperature/工作温度: -5°C - $+40^{\circ}\text{C}$.

Storage temperature/储存温度: -20°C - $+60^{\circ}\text{C}$.

Operating humidity/工作湿度: 30%-85%.

Storage humidity/储存湿度: 10%-95%.

4.2 SAFETY STANDARDS 安规标准

AS/NZS60950; AS/NZS CISPR22:2009

4.3 INRUSH CURRENT 浪涌电流

60A max at 240Vac input for a cold start at 25°C .

在冷机 25°C 时开机输入240VAC最大浪涌电流60A.

4.4 DC INSULATION RESISTANCE 直流绝缘阻抗

Input-Output/输入-输出: $50\text{M}\Omega$ minimum/最小 (at 500VDC)

Input-Body Case/输入-外壳 部分: $50\text{M}\Omega$ minimum/最小 (at 500VDC)

4.5 LEAKAGE CURRENT 泄漏电流

0.25mA maximum, at nominal AC input voltage and frequency

额定交流输入时泄漏电流不得超过0.25mA

4.6 DIELECTRIC WITHSTAND-VOLTAGE 绝缘耐压测试

Input-Output: AC 3000V or DC 4240V (cutoff current 10mA, 60S)

输入-输出: 交流 3000V 或 直流 4240V (漏电流 10mA, 60S)

4.7 PROTECTION 保护

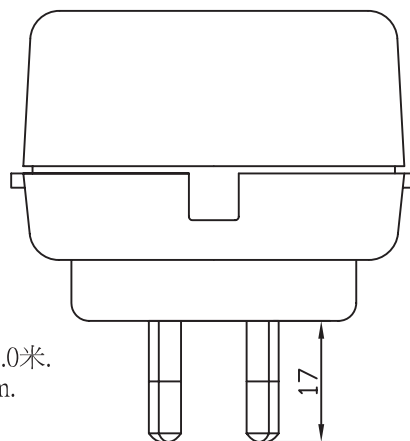
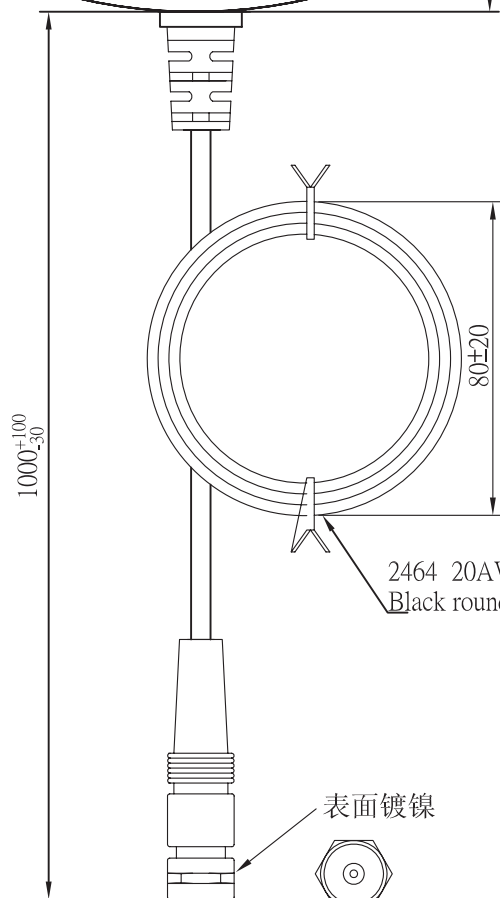
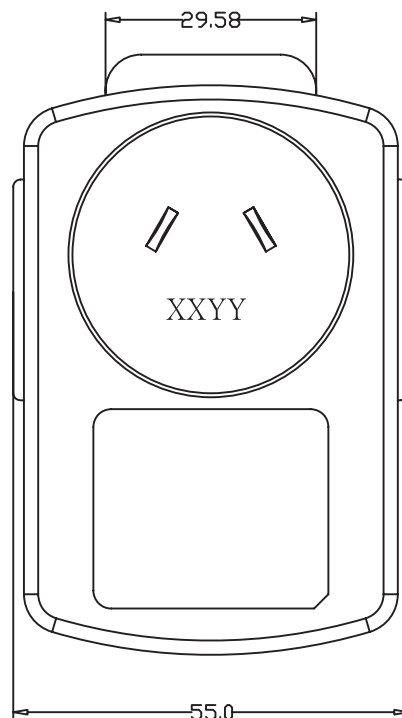
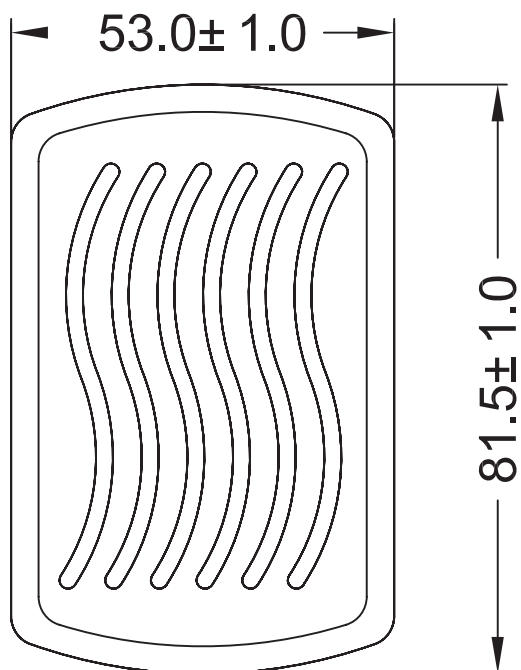
Overload protection/过流保护.

Over voltage protection/过压保护.

Short circuit protection/短路保护.

5. ENCLOSURE/胶壳

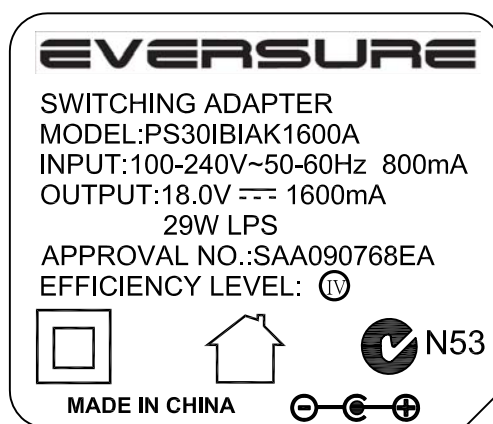
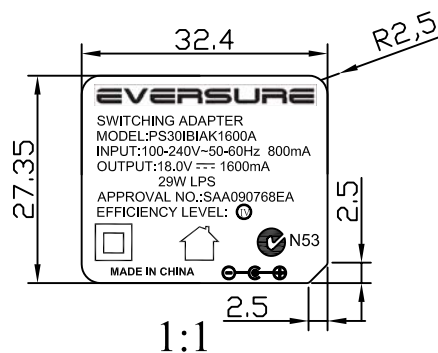
XXYY为正式生产周期,
样品不需打周期.



REMARK/備注: Color of enclosure/膠殼顏色
Black in color/黑色.

Tolerance/公差:±2
Unit/單位:mm

6. NAMEPLATE/铭牌



2:1

银底黑字

Silver background,Black color for characters