

# UP0253A-( ) ( ) P SERIES

## 25 Watt AC/DC Adapter

- ◆ Universal Input 90 to 264 VAC
- ◆ EMI Meets FCC/CISPR 22 Class B
- ◆ MTBF 200Khrs



### SPECIFICATIONS

All specifications are typical at nominal line, full load and 25°C unless otherwise noted.

### INPUT SPECIFICATIONS

Input Voltage Range ..... 90-264VAC  
Input Frequency ..... 47-63 Hz  
Inrush Current ..... 30A max.(Cold Start)

### GENERAL SPECIFICATIONS

Hold-up Time ..... 16mS typ.  
Efficiency ..... 70% typ.  
Leakage Current ..... 0.5mA max.  
Short Circuit Protection ..... Continuous  
Overvoltage Protection ..... 5VDC output only

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range ..... 0°C to 50°C  
Derating 40°C to 50°C ..... 2%/°C  
Temperature Coefficient ..... ±0.02%/°C  
Storage Temperature Range ..... -40°C to +85°C  
Humidity, Non-Condensing ..... 0 to 95% RH  
Cooling ..... Free- Air Convection  
EMI ..... Meets FCC/CISPR 22 Class B Specification



**UNIVERSAL  
MICROELECTRONICS**

3,27TH RD., TAICHUNG INDUSTRIAL PARK,  
TAICHUNG, TAIWAN, R.O.C.  
TEL: 886-4-23590096 FAX: 886-4-23590129

## OUTPUT SPECIFICATIONS

| Model Number | Output Voltage (Volts) | Output Current (Amps) |       |      | Peak <sup>1</sup> (Amps) | Max. Power (Watt) | Efficiency (typ.) | Ripple <sup>2</sup> , P-P (mV) | Total Regulation <sup>3</sup> |
|--------------|------------------------|-----------------------|-------|------|--------------------------|-------------------|-------------------|--------------------------------|-------------------------------|
|              |                        | Min.                  | Rated | Max. |                          |                   |                   |                                |                               |
| UP0253A-01P  | +5(V1)                 | 0                     | 2     | 3    | 4                        | 25                | 70%               | 50                             | ±4%                           |
|              | +12(V2)                | 0                     | 1     | 1.5  | 2                        |                   |                   | 120                            | ±5%                           |
|              | -12(V3)                | 0                     | 0.3   | 0.5  | 1                        |                   |                   | 120                            | ±5%                           |
| UP0253A-02P  | +5(V1)                 | 0                     | 2     | 3    | 4                        | 25                | 70%               | 50                             | ±4%                           |
|              | +12(V2)                | 0                     | 1     | 1.5  | 2                        |                   |                   | 120                            | ±5%                           |
|              | -5(V3)                 | 0                     | 0.3   | 0.5  | 1                        |                   |                   | 50                             | ±5%                           |
| UP0253A-03P  | +5(V1)                 | 0                     | 2     | 3    | 4                        | 25                | 70%               | 50                             | ±4%                           |
|              | +24(V2)                | 0                     | 0.5   | 1.0  | 1                        |                   |                   | 240                            | ±5%                           |
|              | +12(V3)                | 0                     | 0.3   | 0.5  | 1                        |                   |                   | 120                            | ±5%                           |

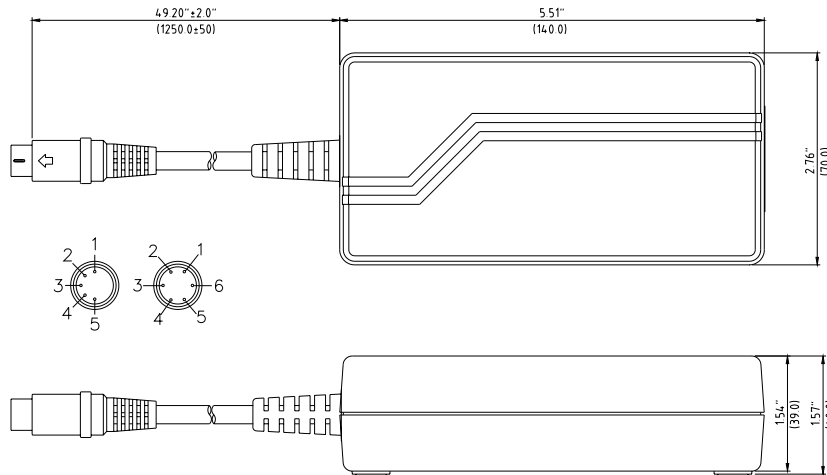
## NOTES

1. Peak output current (total output power must less than 30W) lasting less than one minute with duty factor less than 5%. During peak loading, output voltage may exceed total regulation limits.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to the output cable. Peak to peak and RMS metering equipment shall have a 20 MHz response with probes and cables maintaining frequency response from 200 Hz to 100MHz bandwidth. Output ripple and spikes are measured directly at the output terminals of the power supply without the use of the probe ground clip.
3. Total regulation is defined as the static output regulation at 25°C, including initial tolerance, line voltage within stated limits. And load currents within rated load, but when V1 is rated load and V2 is ≤ 1/10 rated load, the total regulation will be ±10%. V1 must have a minimum of 10% rated load, for V3 to supply rated load.

## PHYSICAL SPECIFICATIONS

Weight: 300g.

Case Material: ABS Plastic UL94V-0 Flammability Rated.



**COLORS BLACK**

## DC plug & pin assignment (CUSTOM DESIGN IS AVAILABLE)

| Output No. | UP0253A-XXP | Connectors         |                    |
|------------|-------------|--------------------|--------------------|
| PIN1       | GND         | DIN PLUG (5P 180°) | DIN PLUG (6P 240°) |
| PIN2       | V1          |                    |                    |
| PIN3       | GND         |                    |                    |
| PIN4       | V2          |                    |                    |
| PIN5       | V3          |                    |                    |
| PIN6       | V1          |                    |                    |

## NOTES

1. All dimensions in inches (mm).
2. Tolerance (except cable length):  
.xx = ±0.04 .xxx = ±0.010



**UNIVERSAL  
MICROELECTRONICS**

3,27TH RD., TAICHUNG INDUSTRIAL PARK,  
TAICHUNG, TAIWAN, R.O.C.  
TEL: 886-4-23590096 FAX: 886-4-23590129