Features

## Wiring Diagram

-Constant Current Output
-TRIAC/ELV Dimming (120V input only)
-Class 2 Compliance
-Damp Location
-5 Year Warranty

-Restart at lowest dimming setting
-Universal Input (120-277V)

| Mechanical and Thermal |  |
| :--- | ---: |
| Dimensions $\quad \Phi=2.126, H=1.181^{\prime \prime}$ |  |
| Weight | 60 g |
| Lead Wire Length | $6.7^{\prime \prime}$ |



## Protection

-Auto-reset electronic short circuit
-Overload protection
-Class 2
-Inherent Thermal Protection

| Environmental Specifications |  |
| :--- | ---: |
| -Operating Temperature | $-20^{\circ}$ to $60^{\circ} \mathrm{C}$ |
| -Storage Temperature | $-20^{\circ}$ to $70^{\circ} \mathrm{C}$ |
| -MTBF | $>100,000 \mathrm{hrs}$ |
| -Lead Free SMT process |  |

[^0]

Note-

1. UL file: E340871

Macron Associate Co. - Power Supply Team
NO.352, Perng-Yi Road, Taiping, Taichung, Taiwan 411
TEL: 886-4-22708357 FAX: 886-4-22767307 Email: macron@macrongroup.com
A0516

1. Input - specification

|  | Units | Minimum | Typical | Maximum | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Input Voltage Range(Vin) | Vac | 108 | 120-277 | 304 |  |
| Input Frequency Range | Hz | 50 | 60 | 63 |  |
| Input Power | W |  | 16 |  |  |
| Power Factor(PF) |  | 0.9 | >0.9 |  | Nominal LED voltage |
| Input Current | A | - | - | $\begin{aligned} & \text { 0.06A@120VAC } \\ & \text { 0.024A@277VAC } \end{aligned}$ |  |
| Inrush Current | A |  |  | 4 A peak | According to IEC 60555 |
| Total Harmonics Distortion (THD) |  |  |  | < 20\% | At nominal input voltage and nominal LED voltage |
| Efficiency |  | - | > 80\% | - | Efficiency is measured after driver has thermally stabilized + full load |
| Isolation | Meet UL1310/UL8750 for class 2 isolation power supply |  |  |  |  |

## 2. Output - specification

|  | Units | Minimum | Typical | Maximum | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Output Voltage(Volt) | Vdc | 35 |  | 43 |  |
| Output Current(lout) | mA |  | 140 |  | Adjustable current setting; please refer to the current setting table |
| Output Current Tolerance | \% |  | $\pm 3$ |  |  |
| Output Ripple Current | < $20 \%$ peak-to-peak of 350mA |  |  |  | $\leqq 20 \%$ pk-to-pk of the rated output current for all models with Vout max $\geqq 32 \mathrm{~V}$ |
|  |  |  |  |  | $\leqq 50 \%$ pk-to-pk of the rated output current for all models with Vout max $\leqq 30 \mathrm{~V}$ |
|  |  |  |  |  | At nominal LED voltage and nominal input voltage without dimming |
| Dimming Range | \% | 6\% |  | 100\% | Please refer to Dimmer compatibility list |
| Star-up Time | ms |  | 100 |  | With nominal LED voltage and without dimmer attached |
|  |  |  | 150 |  | With nominal LED voltage, with an recommended dimmer attached(see dimmer compatibility list) and at the full dimming conduction angle |
| Isolation | Meet UL1310/UL8750 for class 2 isolation power supply |  |  |  |  |
| Operation Case Temperation | ${ }^{\circ} \mathrm{C}$ | -30 |  | 80C |  |

3. EMC / Protection / Compliance

| Conducted and Radiated EMI |  | FCC CFR Title 47 Part 15 Class B and EN55022(CISPR 22) Class B compliant |  |
| :--- | :---: | :--- | :--- |
| Immunity Compliance | ESD (Electrostatic <br> Discharge) | IEC61000-4-2 | 6 kV contact discharge, 8 kV air discharge, level 3 |
|  | Electrical Fast <br> Transient | IEC61000-4-4 | $\pm 2 \mathrm{kV}$ on AC power port for $1 \mathrm{minute}, \pm 1 \mathrm{kV}$ on signal/control lines |
|  | Surge | IEC61000-4-5 | $\pm 1 \mathrm{kV}$ line to line/ $\pm 2 \mathrm{kV}$ line to earth on AC power port, $\pm 0.5 \mathrm{kV}$ for outdoor cables |
|  | Ring Wave |  | ANSI/IEEE c62.41-1-2002 \& c62.41-2-2002 category A, 2.5 kV ring wave |

## THD of the driver VS Power Output (W)



Efficiency of the driver VS Power Output (W)


Macron Associate Co. - Power Supply Team
NO.352, Perng-Yi Road, Taiping, Taichung, Taiwan 411
TEL: 886-4-22708357 FAX: 886-4-22767307 Email: macron@macrongroup.com
A0516

Power Factor VS Power Output (W):



[^0]:    * Dimension in Metrics (Inch)

