

LED Driver

Product Specifications

ANZ#: Z095G, February 24, 2010

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|-------------------------------|---------------|
| LP1020-xx Series | |
| Switch-Mode LED Driver | |
| Total Power | 20 Watts |
| Input Voltages | 100 ~ 277 VAC |
| Number of Outputs | One |

SPECIAL FEATURES ELECTRICAL SPECIFICATIONS

- UL1310, Class 2 and UL879 recognized
- Single output, constant current or constant voltage design
- IP66 compliant
- Suitable for dry and damp locations
- Designed for outdoor or indoor applications
- Suitable in standard electrical junction boxes
- Compact and lightweight
- Active PFC reduces power consumption

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|------------------|--|
| Input range | 100 ~ 304 VAC |
| Frequency | 47 to 63 Hz |
| Power Factor | > 0.92 at full load, 115VAC |
| Crest Factor | 1.5 max. |
| Inrush current | 10.0 Amps maximum at 230VAC, cold start, 25° C |
| Input current | 0.3 Amps maximum at 115VAC |
| Efficiency | 85% typical at maximum load |
| EMI filtering | 47CFR, Part 2, Part 15 and Cispr PUB, 22 Class B |
| Maximum power | 20W |
| Current Accuracy | ±1% (when applicable) |
| Load regulation | ±3% |
| Leakage Current | 300uA typ. |
| Hold up time | Half cycle minimum at 120 VAC and 80% of rated load |
| Protection | Over-voltage, Over current and Short circuit protection: Auto-recovery |

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| ENVIRONMENTAL | |
| Operating temperature: | -30 to 60 °C (De-rating : 1% per ° C from 60~70°C) |
| Storage temperature: | -40 to +85° C |
| Humidity (Non-Condensing): | 5% to 95% |
| Cooling: | Convection |
| Vibration Frequency: | 5 to 50 Hz |
| MTBF: | >100,000 Hours at full load and 25°C ambient conditions (MIL-217F) |
| EMC : | Compliant to 47CFR, Part 2, Part15 and Cispr PUB, 22 Class B |

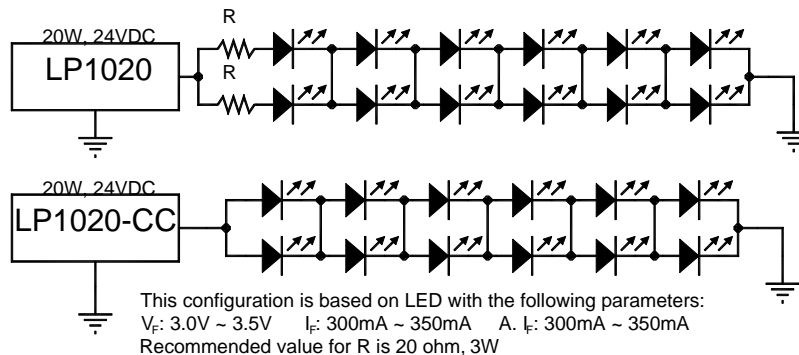
SAFETY

| | |
|--|--------------------------------------|
| UL | UL1310, Class 2 and UL879 recognized |
| cUL | UL1310, Class 2 and UL879 recognized |
| CE | |
| Note: 52VDC output is not cUL recognized | |

| Model Number | Constant Voltage Mode | | | Model Number | Constant Current Mode | | |
|--------------|-----------------------|---------------|-------|-----------------|-----------------------|-----------------|-------|
| | V (DC) | Output A (mA) | Watts | | V (DC) | Output mA(Max.) | Watts |
| LP1020-52 | 52, ±5% | 400 | 20 | LP1020-52-Cxxxx | 24~ 52 | 400, ±5% | 20 |
| LP1020-36 | 36, ±5% | 550 | 20 | LP1020-36-Cxxxx | 18~ 36 | 550, ±5% | 20 |
| LP1020-24 | 24, ±5% | 830 | 20 | LP1020-24-Cxxxx | 12~ 24 | 830, ±5% | 20 |
| LP1020-22 | 22, ±5% | 910 | 20 | LP1020-22-Cxxxx | 12 ~ 22 | 910, ±5% | 20 |
| LP1020-18 | 18, ±5% | 1100 | 20 | LP1020-18-Cxxxx | 9 ~ 18 | 1100, ±5% | 20 |
| LP1020-17 | 17, ±5% | 1250 | 20 | LP1020-17-Cxxxx | 9 ~ 17 | 1250, ±5% | 20 |
| LP1020-15 | 15, ±5% | 1330 | 20 | LP1020-15-Cxxxx | 9 ~ 15 | 1330, ±5% | 20 |
| LP1020-13 | 13, ±5% | 1540 | 20 | LP1020-13-Cxxxx | 7 ~ 13 | 1540, ±5% | 20 |
| LP1020-12 | 12, ±5% | 1660 | 20 | LP1020-12-Cxxxx | 7 ~ 12 | 1660, ±5% | 20 |
| LP1020-10 | 10, ±5% | 2000 | 20 | LP1020-10-Cxxxx | 7 ~ 10 | 2000, ±5% | 20 |

Note: The output current of Constant Current models are adjustable at factory from 50% ~ 100%.

RECOMMEND APPLICATION SCHEMATICS



MECHANICAL DRAWING

Model Information – Single DC output

LP1020-XX – Constant Voltage Model

XX – Available Output Voltage, refer to chart above

LP1020-XXC (YYY) – Constant Current Model

C – Stands for Constant Current Model

XX – Available Output Voltage

YYY – Available Constant Current Settings, 350mA or 700mA or 1050mA

AC input cable

AWG #20, two conductors UL PLTC type or equiv.

DC output cable

AWG #20, two conductors UL PLTC type or equiv.

