

# LED Driver

LP1040-xx Series Switch-Mode LED Driver	
Total Power	40 Watts
Input Voltages	90 ~ 264VAC, 277VAC
Number of Outputs	One

# Product Specifications

ANZ#: Z094i, October 9, 2008

## SPECIAL FEATURES

- UL1310, Class 2 and UL48 compliant
- Single output, ranged from 10V up to 36VDC
- IP66 compliant
- Suitable for dry and damp locations
- Designed for outdoor or indoor applications
- Suitable in standard electrical junction boxes
- Compact, lightweight
- Active PFC reduces power consumption

## ELECTRICAL SPECIFICATIONS

Input range	90 ~ 264 VAC, 277VAC (optional)
Frequency	47 to 63 Hz
Power Factor	> 0.90 at full load, 115VAC
Crest Factor	1.5 max.
Inrush current	30.0 Amps maximum at 230VAC, cold start, 25° C
Input current	0.50 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	40W
Current Accuracy	±1% (when applicable)
Load regulation	±3%
Leakage Current	N/A
Hold up time	300uA typ. half cycle minimum at 120 VAC and 80% of rated load
Protection	Over-voltage, Over current and Short circuit protection: Auto-recovery

## 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

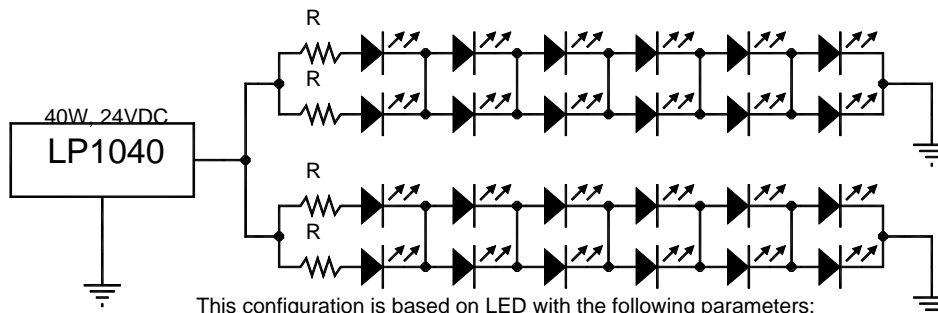
## SAFETY

UL	UL1310, Class 2 and UL879 recognized
cUL	UL1310, Class 2 and UL879 recognized
CE	Certified

Model Number	Constant Voltage Mode			Model Number	Constant Current Mode		
	V (DC)	A (mA)	Watts		V (DC)	mA (max.)	Watts
LP1040-36	36, ±5%	111 - 1100	40	LP1040-36-Cxxxx	18~ 36	1110, ±5%	40
LP1040-24	24, ±5%	167 - 1670	40	LP1040-24-Cxxxx	12~ 24	1670, ±5%	40
LP1040-22	22, ±5%	182 - 1820	40	LP1040-22-Cxxxx	12 ~ 22	1820, ±5%	40
LP1040-18	18, ±5%	222 - 2220	40	LP1040-18-Cxxxx	9 ~ 18	2200, ±5%	40
LP1040-15	15, ±5%	268 - 2680	40	LP1040-15-Cxxxx	9 ~ 15	2680, ±5%	40
LP1040-13	13, ±5%	308 - 3080	40	LP1040-13-Cxxxx	7 ~ 13	3080, ±5%	40
LP1040-12	12, ±5%	333 - 3330	40	LP1040-12-Cxxxx	7 ~ 12	3330, ±5%	40
LP1040-10	10, ±5%	400 - 4000	40	LP1040-10-Cxxxx	6 ~ 10	4000, ±5%	40
LP1040-09	9, ±5%	445 - 4450	40	LP1040-09-Cxxxx	6 ~ 9	4450, ±5%	40
LP1040-09	5, ±5%	445 - 4450					

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

## RECOMMEND APPLICATION SCHEMATICS



This configuration is based on LED with the following parameters:  
V : 3.0V ~ 3.5V I : 300mA ~ 350mA A. I : 300mA ~ 350mA  
Recommended value for R is 20 ohm, 3W

# MECHANICAL DRAWING

## Model Information – Single DC output

### LP1040-XX

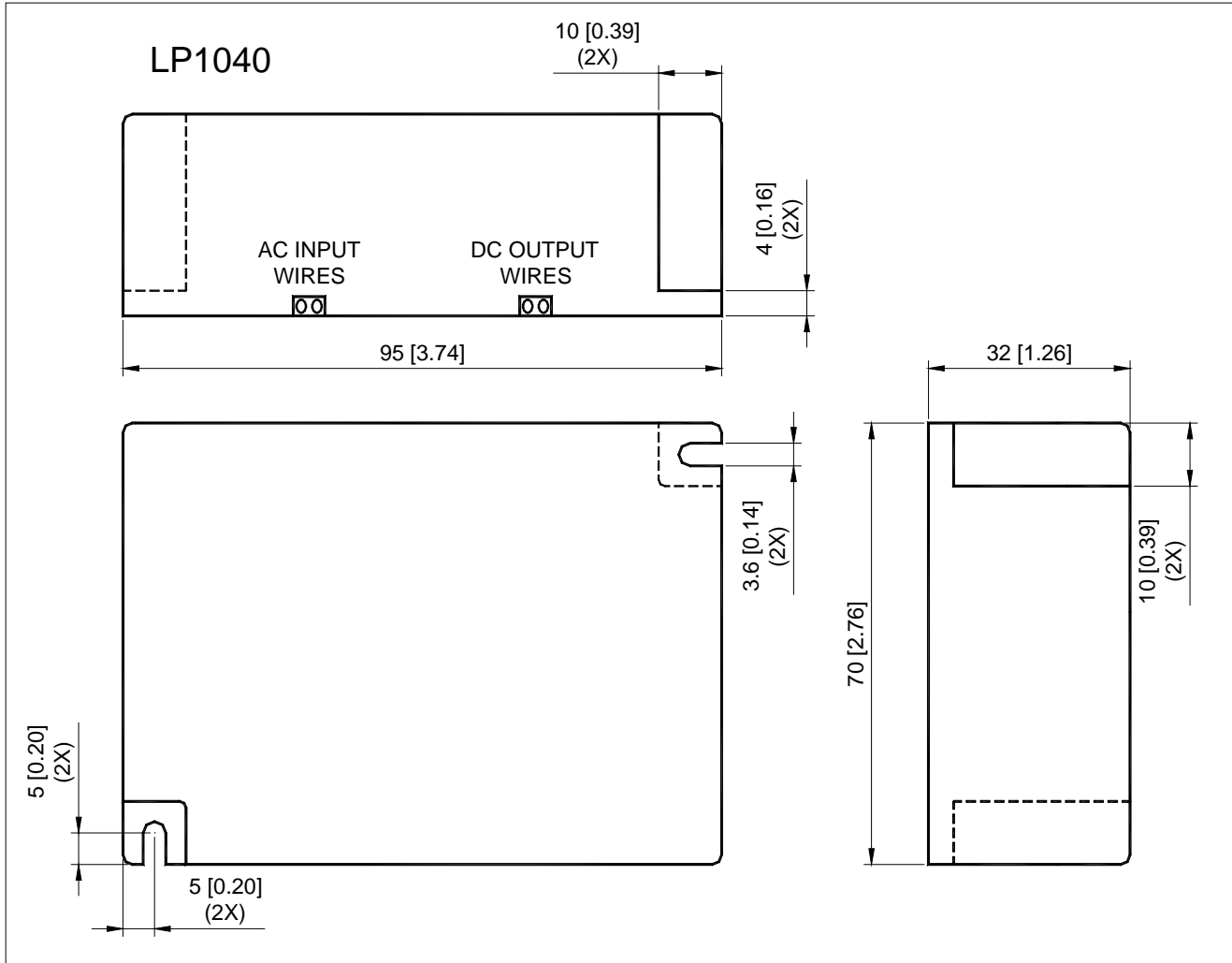
XX – Voltage rating, 10, 08, 09, 10 ..... 24.

### AC input cable

AWG #18, two conductors UL PLTC type or equiv.

### DC output cable

AWG #18, two conductors UL PLTC type or equiv.



mm [inch]