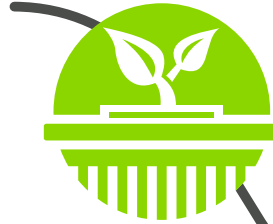


Tiny 0,1-0,5 A / 33 V low-cost variable current LED driver

Driver

- self made LED fixtures
- easy to use
- low cost
- dimming options
- battery supply
- CV supply

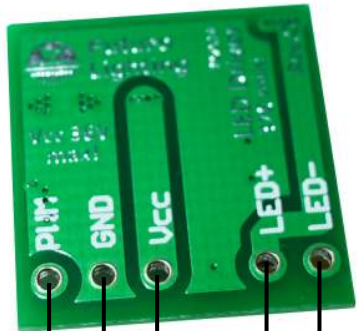


Futuro
Lighting
design

2014

LED Driver 376V

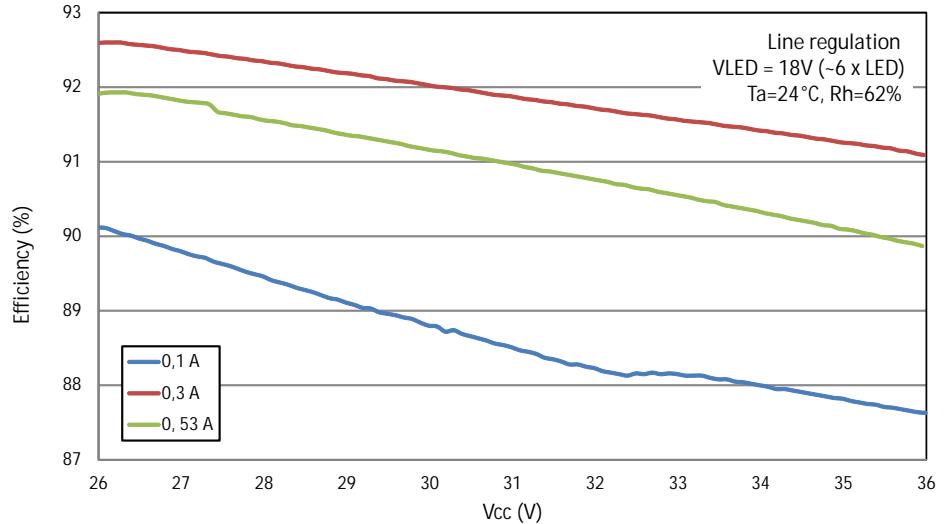
Build your own LED fixture charger and others



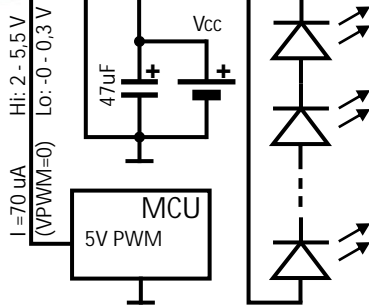
Specification:
 Topology: Buck
 Vcc = 8-32 V DC
 I LED = Adjustable
 see next page for settings

Regulation / dimming:
 - hysteretic controll
 - typical 5% output accuracy
 - high speed PWM dimming

Switching freq: 1 MHz max
 Rsense ratio: 0,13 Ohm / 1 A
 Dimensions: 16 x 16 x 5,5 mm
 Thermal shutdown protection
 Over current protection



Rev.0.3

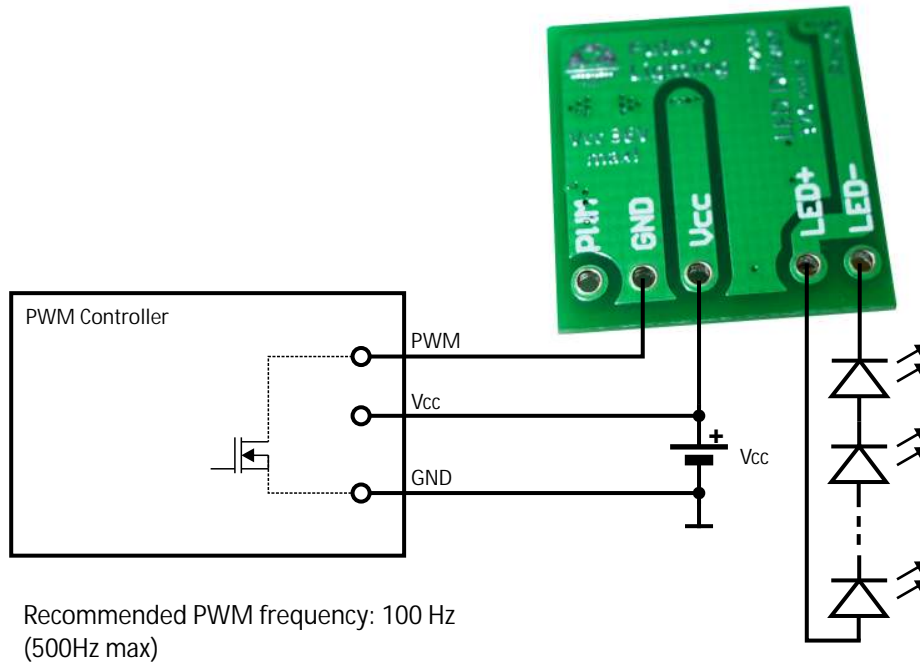


Note: if PWM is not connected max ILED generated
 Standby mode, PWM < 0,3 V (Icc 70uA typical)
 Options: encapsulation, reverse protection



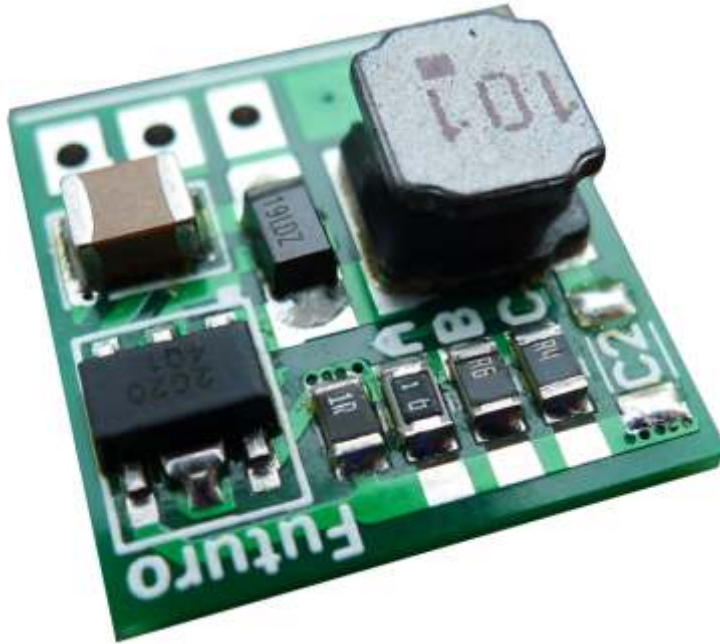
LED Driver 376V

*Power PWM control
similar to LED strip control*



LED Driver 376V

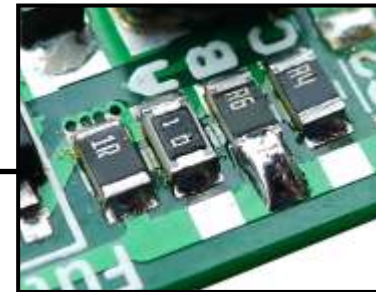
LED current setting



LED current selection from 0,1 A up to 0.53 A

I _{LED}	A	B	C
0,1 A	-	-	-
0,23 A	X	-	-
0,3 A	-	X	-
0,39 A	-	-	X
0,45 A	X	X	-
0,53 A	X	-	X
0,59 A	do not use !		
0,73 A	do not use !		

X - linked by soldering iron



Output current ripple reduction: adding capacitor across LED string (1 uF on module).
Note: capacitor will not affect operating frequency and efficiency, but it will increase startup delay and reduce maximum dimming PWM frequency. Using ceramic capacitor may result in audio noise during PWM dimming depending on PWM frequency.

3-CH Digital dimmer for LED Driver 376

Ready made solution for your lighting needs



Specification:

Supply voltage 7-36 V DC

Power consumption: 1,2 W max

Model: Custom for LED Driver 376

Output: PWM 0 - 100%

Output current: 10 mA / channel max

Number of dimm steps: 250

Illumination: Front - Side Blue LED

End of range indication: blink (Blue)

Power-up fade-in duration: 30 sec

Setting memory type: EEPROM

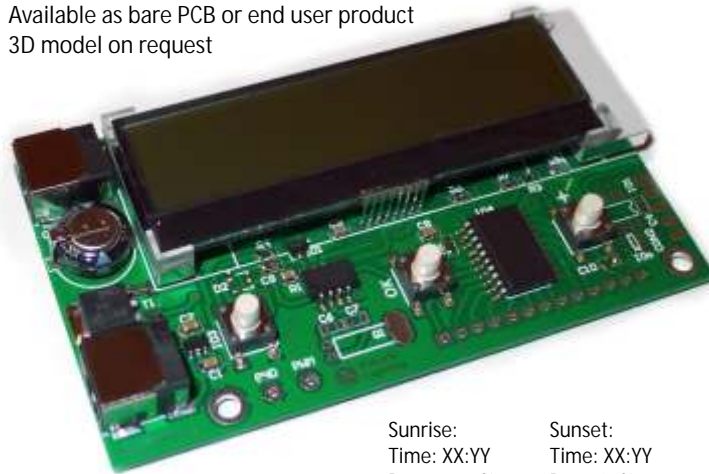
Dimensions: 85 x 85 x 30 mm



AquaTimer & LED Driver 376

Artificial sun for Aquarium life
Application example

Available as bare PCB or end user product
3D model on request



Specification:

Supply Voltage: 6-25 VDC

Supply current: <15 mA

Power consumption: 0,65 W max

Clock source: RTC 24h

Settings for sunset and sunrise:

Start time XX:YY

Intensity 0-100%

Dimm time: 5-99 minutes

PWM frequency: 2000 Hz

Resolution: 1000 steps

Output: 5V / 10mA

Output: CV, 4A max

Display: 2x16 lines

Actual time, status,

intensity, Menu

Illuminated (white)

Dimensions: 87x50x10 mm

Others:

- Reverse protection

- >3 days clock backup

Sunrise:

Time: XX:YY

P = 10-100%

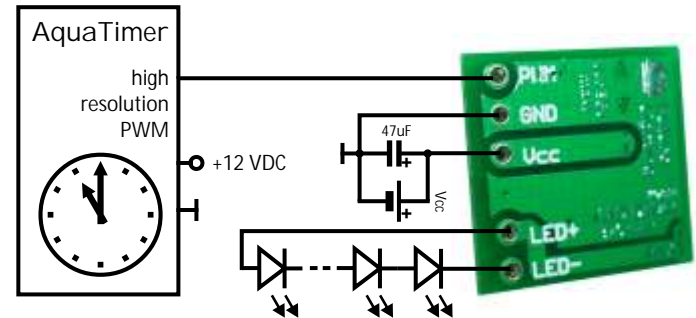
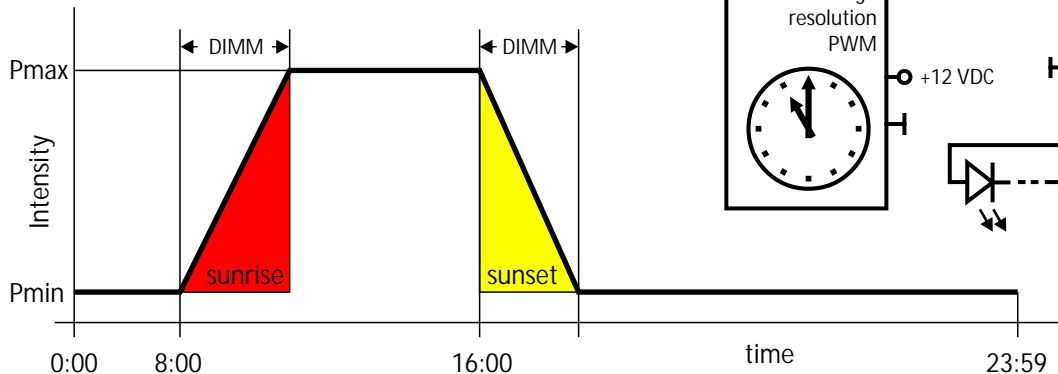
Dimm = 5-99

Sunset:

Time: XX:YY

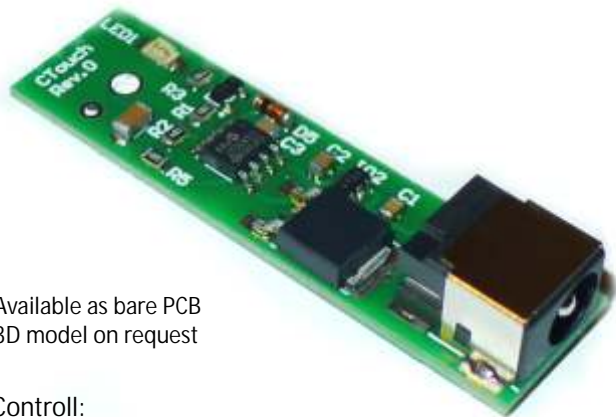
P = 0-90%

Dimm = 5-99



TouchDIMM & LED Driver 376

Just single push to adjust
Application example



Available as bare PCB
3D model on request

Control:
ON / OFF - short touch (<2sec)



Intensity increase
Touch and hold till reaching required
intensity (initial status OFF)



Intensity decrease
Touch and hold till reaching required
intensity (initial status ON)



Indicator status
Inactive when off or during
fade in and out

Specification:

Supply Voltage: 6-25 VDC

Supply current: <5 mA

Output: PWM / CV 4A max

PWM frequency: 2000 Hz

Resolution: 1000 steps

Output: 5V / 10mA

Dimm steps: 100

Dimming characteristic: Log

Dimensions:

50x13x10 mm

50x13x3.5 mm (wo DC con)

Others:

- Reverse protection
- implemented soft fade in and fade out
- illumination of touch button
- built in N-MOS for CV LED strips

