



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Features

LED DRIVER

- Constant Voltage Output
- ENEC, UL, RCM and CB Certified
- Power Factor Corrected
- Short Circuit, Overload and Overtemperature Protected

Description

The RACV30 is the first of a new series of constant voltage LED drivers, ideal for powering LED strips and LED modules in applications such as cove lighting, signage, back lighting, channel letters, displays or under cabinet lighting. The input voltage range of 90 to 264VAC assures full functionality worldwide. The new drivers provide up to 30 watts and are available with outputs of 12VDC or 24VDC. The output voltages are closely regulated to compensate for varying loads or supply changes (2% max.)

Selection Guide

| Part Number | Input Voltage Range (VAC) | Output Voltage (VDC) | Output Current Range (mA) | Efficiency typ. (%) |
|-------------|---------------------------|----------------------|---------------------------|---------------------|
| RACV30-24 | 90-264 | 24 | 0-1250 | 84 |
| RACV30-12 | 90-264 | 12 | 0-2500 | 83 |

Specifications (typical at 25°C, nominal input voltage and full load)

| | | |
|---|--|--------------------------|
| Input Voltage Range | 90-264VAC or 140-370VDC | |
| Input Frequency Range | 47-63Hz | |
| Input Current | Full Load | < 380mA |
| Power Factor Correction | Full Load | >0.92 |
| THD | Full Load, 115VAC | 12% max. |
| Inrush Current | (2ms peak) | 30A max. |
| Input Fuse | internal 2A/250V | |
| Output Voltage Accuracy | (Output Load min <-> max) | ±5% |
| Load Regulation | (Output Load min <-> max) | 2% max. |
| Line Regulation | (VACin min <-> VACin max) | 2% max. |
| Output Ripple | 3% max. | |
| Operating Frequency | ≤125kHz | |
| Isolation Voltage | 3KVAC / 1 minute | |
| Operating Temperature Range (free air convection) | Ambient Temperature | -20°C to +50°C |
| | Case Temperature | 75°C max. |
| Humidity | 85% RH max. | |
| Case Material | Epoxy UL94V-0 | |
| Weight | RACV30-24 | 167g |
| | RACV30-12 | 170g |
| MTBF | MIL STD 217F | 30x10 ³ hours |
| Design Lifetime | 70 x 10 ³ hours max. | |
| EMC Standards | EN55015 FCC18A | |
| Certifications | | |
| LED General Safety | UL8750, cUL8750 | |
| ENEC | EN61347-2-13:2006 EN61347-1:2008 | |
| PSE | J61347-1(H20), J61347-2-13(H21), J55015(H20) | |
| Screw Terminal Specification | 14AWG or 2.5mm ² | |
| Connector Plug Specification | 5.5mm connector | |
| Short Circuit Protection | Current Limit, Automatic Restart | |
| Overload Protection | Full Load | 110~160% |
| Overtemperature Protection | Tj=110°C | Automatic Restart |

LIGHTLINE

AC/DC-Converter

with 5 year Warranty

RECOM

30 Watt PFC Single CV Output



EN61347-2-13 Certified
UL-8750 Certified
cUL-8750 Certified

RACV30

Note:

All LED Drivers may not be used without a load. They must be switched on the primary side only. Noncompliance may damage the LED or reduce its lifetime.

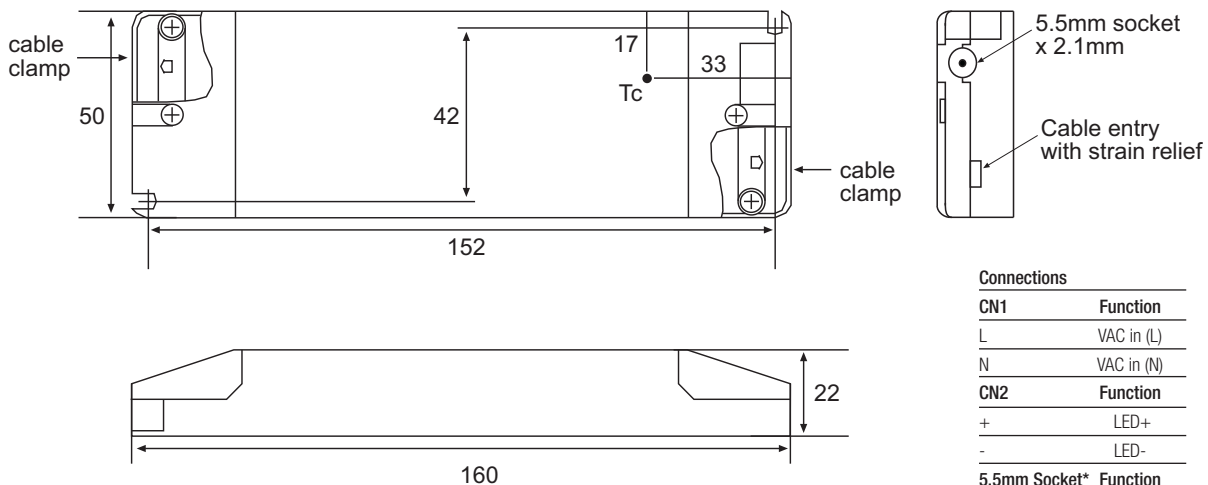
Refer to Application Notes

Characteristic

Maximum Number of LED drivers per circuit breakers

| Condition | Circuit Breaker | Circuit Breaker Current | | | |
|---------------------------------|-----------------|-------------------------|-----|-----|-----|
| | | 10A | 16A | 20A | 25A |
| 115VAC, 10hm 90° phase angle | Typ | | | | |
| | C | 32 | 48 | 57 | 72 |
| 230VAC, 10hm 90° phase angle | B | 24 | 38 | 46 | 58 |
| | C | 38 | 62 | 74 | 92 |
| 277VAC, 10hm 90° phase angle | B | 28 | 44 | 53 | 66 |
| | C | 44 | 71 | 84 | 106 |

Package Style and Pinning



| Connections | |
|----------------------|-----------------|
| CN1 | Function |
| L | VAC in (L) |
| N | VAC in (N) |
| CN2 | Function |
| + | LED+ |
| - | LED- |
| 5.5mm Socket* | Function |
| Pin | LED+ |
| Shell | LED- |

Tolerance
 XX = +/-1mm
 XX.X = +/-0.5mm

RACV30

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