## : ©hipsmall

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!


## Contact us

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Thomas
Research Products

LED-50W Series
Fixed Output and Dimmable
Switch Mode LED Drivers


Constant Current Models

| Model | Output Current <br> $(m A \pm 3 \%)$ | Output Voltage <br> Range $(V d c)$ | Max. Output <br> Power $(W)$ | Typical <br> Efficiency |
| :---: | :---: | :---: | :---: | :---: |
| LED50W-142-C0350-XX | 350 | $47-142$ | 49.7 | $89 \%$ |
| LED50W-111-C0450-XX | 450 | $37-111$ | 49.9 | $89 \%$ |
| LED50W-072-C0530-XX | 530 | $24-72$ | 38.1 | $88 \%$ |
| LED50W-072-C0700-XX | 700 | $24-72$ | 50 | $88 \%$ |
| LED50W-060-C0830-XX | 830 | $20-60$ | 49.8 | $88 \%$ |
| LED50W-048-C1050-XX | 1050 | $16-48$ | 50 | $88 \%$ |
| LED50W-042-C1190-XX | 1190 | $14-42$ | 50 | $87 \%$ |
| LED50W-040-C1250-XX | 1250 | $13-40$ | 50 | $87 \%$ |
| LED50W-036-C1400-XX | 1400 | $12-36$ | 50 | $87 \%$ |
| LED50W-029-C1750-XX | 1750 | $9-29$ | 50 | $87 \%$ |
| LED50W-024-C2100-XX | 2100 | $8-24$ | 50 | $87 \%$ |
| LED50W-020-C2500-XX | 2500 | $7-20$ | 50 | $87 \%$ |
| LED50W-018-C2800-XX | 2800 | $6-18$ | 50 | $86 \%$ |
| LED50W-015-C3330-XX | 3330 | $5-15$ | 49.9 | $85 \%$ |
| LED50W-012-C4200-XX | 4200 | $4-12$ | 50 | $84 \%$ |

-XX indicates dimming options are available. See options at left. Blank = fixed current output

## Constant Voltage Models

| Model | Output Voltage Output Current <br> $(V d c \pm 5 \%)$ <br> Range $(\mathrm{mA})$ | Max. Output <br> Power $(W)$ | Typical <br> Efficiency |  |
| :---: | :---: | :---: | :---: | :---: |
| LED50W-012 | 12 | $1050-4200$ | 50 | $84 \%$ |
| LED50W-015 | 15 | $833-3330$ | 49.9 | $85 \%$ |
| LED50W-018 | 18 | $700-2800$ | 50 | $86 \%$ |
| LED50W-020 | 20 | $625-2500$ | 50 | $87 \%$ |
| LED50W-024 | 24 | $525-2100$ | 50 | $87 \%$ |
| LED50W-029 | 29 | $438-1750$ | 50 | $87 \%$ |
| LED50W-036 | 36 | $350-1400$ | 50 | $87 \%$ |
| LED50W-040 | 40 | $313-1250$ | 50 | $87 \%$ |
| LED50W-042 | 42 | $298-1190$ | 50 | $87 \%$ |
| LED50W-048 | 48 | $263-1050$ | 50 | $88 \%$ |
| LED50W-060 | 60 | $208-830$ | 49.8 | $88 \%$ |
| LED50W-072 | 72 | $175-700$ | 50 | $88 \%$ |
| LED50W-111 | 111 | $113-450$ | 49.9 | $89 \%$ |
| LED50W-142 | 142 | $88-350$ | 49.7 | $89 \%$ |

## Note:

LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

- Total Power: 50 Watts
- Input Voltage: 100-277 Vac Nom.
- UL Dry \& Damp Location Rated
-IP66
- High Power Factor
- Constant Current \& Constant Voltage with Isolation
- Black Magic Thermal Advantage ${ }^{\text {TM }}$ Plastic Housing
-UL8750
- UL Sign Components Manual (S.A.M. Models)


## Dimming Option:

0-10V \& Resistance dimmable models include an extra two wires +Purple/-Gray on the output side. "-D" Compatible with most quality $0-10 \mathrm{~V}$ wall dimmers. See page 3 for additional specifications.

## Dimensions



## Power Characteristics





Lifetime / Case Temperature
(Full Load @ 120Vac)


| Safety Cert. | Standard |
| :--- | :--- |
| UL/CUL | UL8750 |
| CSA | 22.2 |
| CE | EN61347 |
| EMC Standard | Notes |
| EN55015 |  |
| EN61000-3-2 | $>80 \%$ Rated Power |
| EN61000-3-3 | Class C |
| FCC, 47CFR Part 15 | Class B |
| EN6100-4-5 | 2KV L-N, 8/20 $\mu$ sec <br> Surge Protection |

## UL Conditions of Acceptability <br> See website for additional information

[^0]LED-50W Series

## Fixed Output and Dimmable Switch Mode LED Drivers

## "-D" Option: 0-10VDC and Resistance Dimming

| Parameters | Minimum | Typical | Maximum |
| :--- | :---: | :---: | :---: |
| Source Current out of 0-10V Purple Wire | 0 mA | -- | 2 mA |
| Absolute Voltage Range on 0-10V (+) Purple Wire | -2.0 V | -- | +15 V |

Output Current / 0-10VDC Dimming Input

Typical Dimming Circuit



## Notes:

1. $0-10 \mathrm{~V}$ dimmable version comes with an extra two wires +Purple/-Gray on the output side.
2. Compatible with most 0-10V dimmers. Recommended dimmer is Leviton IP710 or equivalent
3. $0-10 \mathrm{~V}$ dimmable version is not intended to dim below about $5 \%$ @ V or $10 \%$ @ 1.0 V
4. $0-10 \mathrm{~V}$ dimmable version output will be $100 \%$ with Purple/Gray open and minimum with Purple/Gray Shorted.

[^0]:    Note: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications
     factors affect driver lifetime but are not represented in this calculation.

