

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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### **LED-12W Series** Switch Mode LED Driver



<b>Electrical Specif</b>	ications	
Input Voltage Range:	100-277 Vac Nom. (90-305 V Min/Max)	
Input Over-Voltage:	Can endure 320Vac for 48 Hrs, 350Vac for 2 Hrs	
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)	
Power Factor:	>0.90 @ 120V, >0.70 @ 277V	
Inrush Current:	<10.0 Amps max @ 230 Vac, cold start 25°C	
Input Current:	0.12 Amps max at 120 Vac	
Maximum Power:	12W	
Line Regulation:	± 3% (when applicable)	
Load Regulation:	± 4%	
THD:	≤ 20% @ 120 Vac, ≤ 35% @ 277 Vac	
Leakage Current:	300 μA Typical	
Hold Up Time:	Half Cycle	
Protections		
Over-voltage	Output	
Over-current	Output	
Short Circuit	Auto Recovery	
<b>Environmental</b> 5	Specifications	
Max Case Life Temp: (5 year warranty)	64°C	
Maximum Case Temp (UL):	80°C	
Minimum Starting Temp:	-30°C	
Storage Temperature:	-40°C to +85°C	
Humidity:	5% to 95%	
Cooling:	Convection	
Vibration Frequency:	5 to 55 Hz/2g, 30 minutes	
Sound Rating:	Class A	
MTBF:	>550,000 Hours @ full load & 40°C ambient conditions per MIL-217F Notice 2	

• Total Power: 12 Watts

EMC: Weight:

• Input Voltage: 100-277 Vac Nom. • UL Dry & Damp Location Rated

- High Power Factor
- Constant Current & Constant Voltage with Isolation

4.5 oz. (128 g)

Compliant to CISPR 22 Class B, CISPR 14-1 Class B, GB4343 1-2003, GB17625.1-2003

- Black Magic Thermal Advantage™ Plastic Housing
- UL Sign Components Manual (S.A.M. Models)





#### **Constant Current Models**

Model	Output Current (mA ±3%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
LED12W-48-C0250	250	24-48	12	80%
LED12W-36-C0250	250	18-36	9	77%
LED12W-36-C0350	350	18-36	12.6	80%
LED12W-24-C0350	350	12-24	8.2	78%
LED12W-24-C0500	500	12-24	12	78%
LED12W-16-C0700	700	8-16	11.2	78%
LED12W-16-C0800	800	8-16	12.8	78%
LED12W-12-C1000	1000	6-12	12	77%

#### **Constant Voltage Models**

Model	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
LED12W-12 •	12	250-1000	12	77%
LED12W-16	16	200-800	12.8	78%
LED12W-24 •	24	125-500	12	78%
LED12W-36	36	88-350	12.6	80%
LED12W-48	48	63-250	12	80%

Indicates S.A.M.

Class 2: US/Canada

Safety Cert.	Standard
UL/CUL	UL8750
CSA	22.2
CE	EN61347
EMC Standard	Notes
EN61000-3-2	
EN61000-3-3	Class C
FCC, 47CFR Part 15	Class B
EN6100-4-5	2KV L-N, 8/20 μsec Surge Protection

#### 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.

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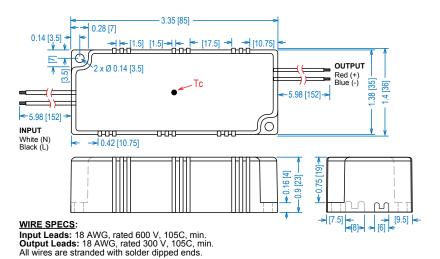




# **LED-12W Series**Switch Mode LED Driver

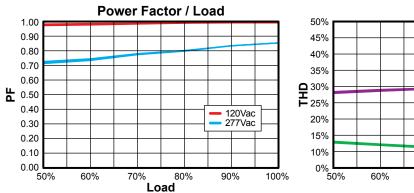


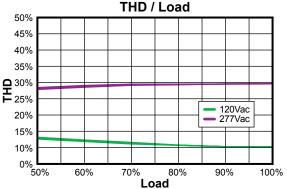
#### **Dimensions**

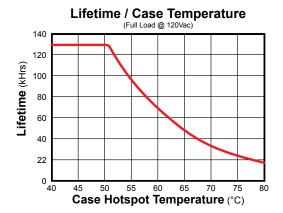


IN [mm]

#### **Power Characteristics**







**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 as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.