

Shenzhen Ledfriend Optoelectronics Co., Ltd.

1. Product description



Isolated LED driver, originally designed for class I LED luminaires

and also suitable for the class II luminaires.

Category: typical AC220-240V metal case series.

Product properties: active PFC, high PF, high efficiency, low THD. Application: tri-proof lights, grid lights and linear lights etc. Warranty: 5 years (please refer to the warranty condition).

Certificates:









2. Technical Data(1)

	Full model number	LF-GMR060YE 1300H(U)	LF-GMR060YE 1350H(U)	LF-GMR060YE 1400H(U)	LF-GMR060YE 1450H(U)	LF-GMR060YE 1500H(U)			
Output	Output voltage	27-40VDC	27-40VDC	27-40VDC	27-40VDC	27-40VDC			
	Output current	1300mA	1350mA	1400mA	1450mA	1500mA			
	Ripple current	≤450mA							
	Ripple voltage	≤4V							
	Current tolerance	±5%							
	Time to light	230Vac ≤0.5S							
	Temperature drift	±10%							
	Output Line regulation	±5%							
Input	Input Line regulation	±5%							
	Rated input voltage	220-240 Vac, (Max input voltage: 180-264Vac)							
	Frequency	47Hz-63Hz							
	Input current	0.6A Max							
	Power factor	≥0.95@230Vac							
	THD	≤20%@230Vac							
	Efficiency	≥87%@230Vac ≥88%@230Va							
	In-rush current (peak/duration)	I<60A/350uS@230Vac							
	Typ. power input on stand-by	Pin<1W							
Protective features	No-load	Max. output voltage (no-load voltage) 55V							
	Short-circuit	Hiccup mode (auto-recovery)							
Environment condition	Working temperature	-30°C -+50°C							
	Working humidity	20-90%RH (no condensation)							
	Storage temperature/ humidity	-40°C∼+80°C (6 months under the class I environment); 10-90% RH (no condensation)							
	Atmospheric pressure	86-106KPa							
Safety and norms	Certifications	TUV, CE, RCM, CB							
	Hi-pot test	I/P-O/P:3.75KVac,<5mA 60S I/P-PG:1.6KVac,<5mA 60S							
	Insulation resistance	I/P-O/P:500VDC,>100MΩ							
	Surge level	Comply withIEC61000-4-5(L/N:2KV,L/PG:4KV,N/PG:4KV)							
	EMI	Comply with EN55015, EN61000-3-2							
	EMS	Comply with N61000-4-2,3,4,5,6,8,11; EN61547.							
Others	Packaging	Carton Size:385*285*210mm(L*W*H); Weight: 210g±5%/pc; Gross weight: 9.0KG±5%/ctn; 36pcs/ctn							
	IP level	/							
	Warranty	5 years (Max. case	temperature must not	exceed 70°C).					
Testing equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.								
Test conditions	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50% AC input 230V and 90% output load.								



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Additional Remark

- 1. In the power supply circuit, it is recommended that the customer should install an over-under-voltage protection and surge protection device to ensure the safety of using electricity.
- 2. The PC cover, shell, end caps used together with the LED driver inside the LED lamp must meet the UL94V-0 fire rating level or above.
- 3. As a part of the LED lamp, the LED driver is not the only factor determining the EMC performance of the LED lamp. And the EMC performance is also related to the LED lamp's structure and the wire routing. Thus we strongly recommend the manufacturer of the finished LED lamp must re-confirm the EMC of the LED lamps.

3. Technical Data (2)

	Full model number	LF-GMR060YE 0950H(V)	LF-GMR060YE 1000H(V)	LF-GMR060YE 1050H(V)	LF-GMR060YE 1100H(V)			
Output	Output voltage	35-55VDC	35-55VDC	35-55VDC	35-55VDC			
	Output current	950mA	1000mA	1050mA	1100mA			
	Ripple current	≤330mA						
	Ripple voltage	≤6V						
	Current tolerance	±5%						
	Time to light	230Vac ≤0.5S						
	Temperature drift	±10%						
	Output Line regulation	±5%						
Input	Input Line regulation	±5%						
	Rated input voltage	220-240 Vac (Max inpu	it voltage: 180-264Vac)					
	Frequency	47Hz-63Hz						
	Input current	0.6A Max						
	Power factor	≥0.95@230Vac						
	THD	≤20%@230Vac						
	Efficiency	≥89%@230Vac						
	In-rush current	I<60A/350uS@230Vac						
	(peak/duration)	D' -1117						
	Typ. power input on stand-by	Pin<1W						
Protective features	No-load	Max. output voltage (no-load voltage) 70V						
	Short-circuit	Hiccup mode (auto-recovery)						
	Working temperature	-30°C - +50°C						
Environment	Working humidity	20-90%RH (no condensation)						
condition	Storage temperature/ humidity	-40°C~+80°C (6 months under the class I environment); 10-90%RH (no condensation)						
	Atmospheric pressure	86-106KPa						
	Certifications	TUV, CE, RCM, CB						
	Hi-pot test	I/P-O/P:3.75KVac,<5mA 60S I/P-PG:1.6KVac,<5mA 60S						
Safety and norms	Insulation resistance	I/P-O/P:500VDC,>100MΩ						
	Surge level	Comply withIEC61000-4-5(L/N:2KV,L/PG:4KV,N/PG:4KV)						
	EMI	Comply with EN55015	, EN61000-3-2					
	EMS		-2,3,4,5,6,8,11; EN61547.					
Others	Packaging	Carton Size:385*285* 36pcs/ctn	210mm(L*W*H); Wei	ght: 210g±5%/pc; Gross	weight: 9.0KG±5%/ctn;			
	IP level	/						
	Warranty	5 years (Max. case temp	perature must not exceed 70	0°C).				
Testing equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.							
Test conditions	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% output load.							



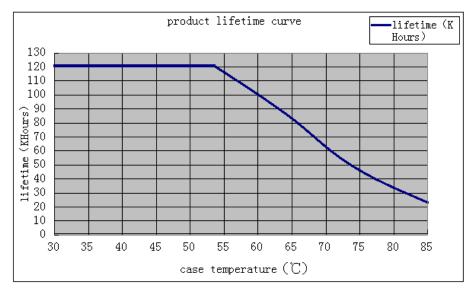
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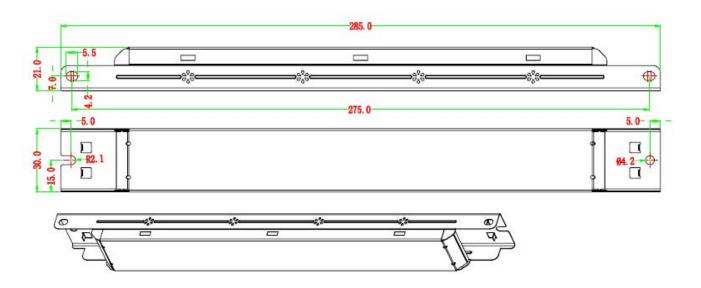
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4. Product Referenced Lifetime Curve

The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40° C, 50° C, 60° C, 70° C, 80° C.



5. Dimensional Drawing(mm)



6. Wire connection Diagram

