

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: AC220-240V typical 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).

Certifications:







2. Technical data (1)

	Full model number	LF-GMR080YE 1600H(U)	LF-GMR080YE 1700H(U)	LF-GMR080YE 1800H(U)	LF-GMR080YE 1900H(U)	LF-GMR080YE 2000H(U)		
	Output voltage	27-40 VDC	27-40 VDC	27-40 VDC	27-40 VDC	27-40 VDC		
Output	Output current	1600mA	1700mA	1800mA	1900mA	2000mA		
	Ripple current	< 600mA						
	Ripple voltage	≤4V						
	Current tolerance	±5%						
	Time to light	220Vac ≤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	≥0.90/230Vac						
	THD	≤15%/230Vac						
	Efficiency	≥88%/230Vac	≥88%/230Vac	≥88%/230Vac	≥89%/230Vac	≥89%/230Vac		
	In-rush current (peak /duration)	I<60A/350uS@230Vac						
	Typ. power input on stand-by	Pin< 2W						
Protective	No-load	Max. output voltage (no-load voltage) 50V						
features	Short-circuit	Hiccup mode (auto-recovery)						
	Working temperature	temperature $-30^{\circ}\text{C} - +50^{\circ}\text{C}$						
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, RCM, CE, CB, GS						
	Hi-pot test	I/P-O/P: 3.75KVac, <5mA, 60S						
Safety and	Insulation resistance	I/P-O/P: 500VDC, >100MΩ						
norms	Surge level	Comply with IEC61000-4-5(L/N:2KV,L/PG:4KV,N/PG:4KV)						
	EMI	Comply with EN55015, EN61000-3-2.						
	EMS	Comply with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.						
	Packing (weight) Net weight: 300g±30g/pc; 36pcs/carton; 11.8KG±10%/carton; Carton size: 39 x 29 x 21 cm (LxWxH).							
Others	IP level /							
o the s	Warranty condition	5 years (May, case temperature must not avoided 70°C)						
Testing equipment	Warranty condition 5 years (Max. case temperature must not exceed 70°C). 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.							
Additional Remark	 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. 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. 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. 							

Model	LF-GMR080YE	Series	AC220-240V typical linear metal case
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3. Technical data (2)

	Full model number	LF-GMR080YE 1200H(V)	LF-GMR080YE 1300H(V)	LF-GMR080YE 1400H(V)	LF-GMR080YE 1450H(V)		
	Output voltage	35-55VDC	35-55VDC	35-55VDC	35-55VDC		
Output	Output current	1200mA	1300mA	1400mA	1450mA		
	Ripple current	<450mA					
	Ripple voltage	≤5.5V					
	Current tolerance	±5%					
	Time to light	230Vac < 0.5S					
	Temperature drift	±10%					
	Output Line regulation	±5%					
	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	≥0.90/230Vac					
Input	THD	≤15%/230Vac					
	Efficiency	≥88%/230Vac	≥88%/230Vac	≥89%/230Vac	≥89%/230Vac		
	In-rush current (peak /duration)	I<60A/350uS@230Vac					
	Typ. power input on stand-by	Pin< 2W					
Protective	No-load	Max. output voltage (no-load voltage) 70V					
features	Short-circuit	Hiccup mode (auto-recovery)					
	Working temperature	-30°C - +50°C					
Invinonment	Working humidity	10-90%RH (no condensation)					
Environment 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, RCM, CE, CB, G	S				
	Hi-pot test	I/P-O/P: 3.75KVac, <5mA, 60S					
Safety and	Insulation resistance	I/P-O/P: 500VDC,>100MΩ					
norms	Surge level	Comply with IEC61000-	-4-5(L/N:2KV,L/PG:4KV	,N/PG:4KV)			
	EMI	Comply with EN55015, EN61000-3-2.					
	EMS	Comply with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.					
	Packing (weight)	Net weight: 300g±30g/pc; 36pcs/carton; 11.8KG±10%/carton; Carton size: 39 x 29 x 21 cm (LxWxH).					
Others	IP level	1					
	Warranty condition	condition 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.						
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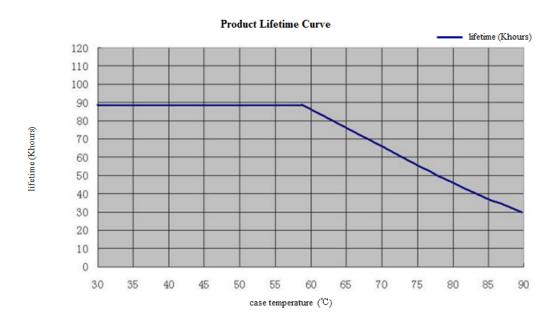
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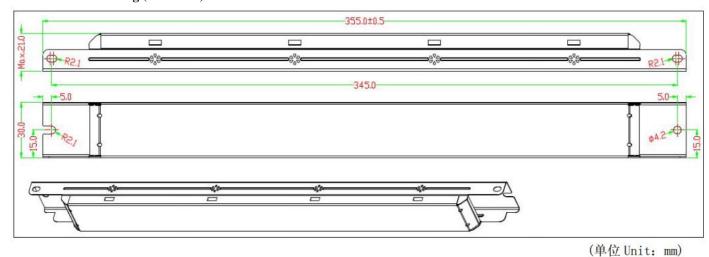
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4. Product Referenced Lifetime Curve

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 and 80° C.



5. Dimensional Drawing (unit: mm)



6. Wire Connection Diagram:

