

**Description:**

EFC-09 series, No 100/120Hz flicker, Real long-life LED Drivers with Rubycon long life capacitors, long life, high efficiency, Provides ±5% CV and ±10% CC accuracy, EcoSmart® - Meets all current international energy efficiency standards - (CECP) / CEC / ENERGY STAR EPS v2 / EU CoC / EISA 2007



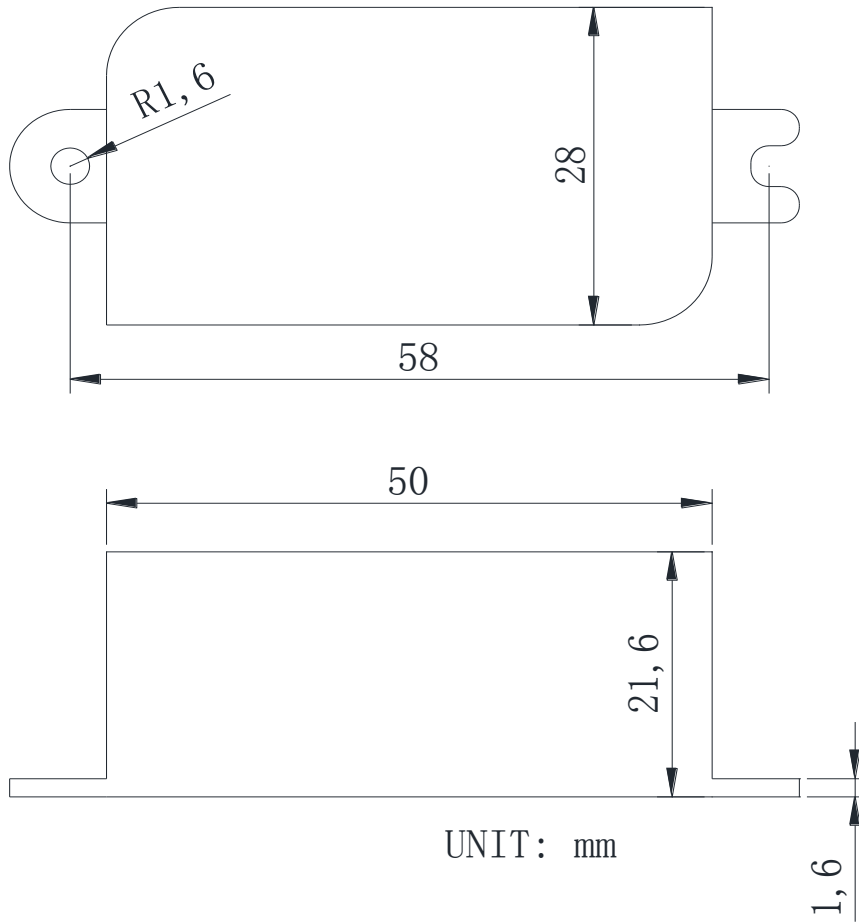
1. No Visible Flicker - No Invisible or Imperceptible Flicker
2. Real Long-life, 50000Hours
3. Rubycon long-life capacitors, 10 times longer than ordinary life electrolytic capacitors
4. Protections: Short circuit / Overload / Over voltage / Over temperature
5. IP67 design for indoor or outdoor installations
6. 100% full load burn-in test
7. Suitable for LED lighting and moving sign applications
8. Compliance to worldwide safety regulations for lighting
9. 3 years warranty

**SPECIFICATION**

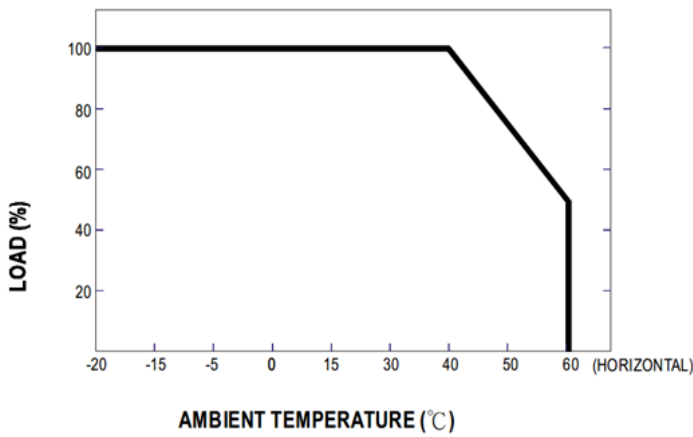
MODEL		EFC-09-12	EFC-09-18	EFC-09-24	EFC-09-30	EFC-09-36	EFC-09-42
OUTPUT	Rated current	700mA	500mA	400mA	320mA	300mA	230mA
	Constant Current Region	9~12V	12~18V	15~24V	24~30V	24~36V	30~42V
	Current Accuracy	5%	5%	5%	5%	5%	6%
	Rated Power	8.4W	9W	9.6W	9.6W	10.8W	9.66W
	Setup time	<300 ms					
	Ripple & Noise	0.5% Operating Voltage					
INPUT	Voltage range	90~265VAC,					
	Power factor	PF> 0.6 at full load and rated output voltage					
	Max AC Current	0.4A/100VAC	0.2A/230VAC				
	Frequency range	47~65Hz					
	Efficiency (Typ.)	80%	81%	82%	83%	85%	85%
PROTECTION	Short Circuit	short circuit protection , Auto Recovery					
	Over Temperature	Maximum temperature of components inside the case					
	Over current	95% ~ 110% Protection type : Constant current limiting, recovers automatically after fault condition is removed					
ENVIRONMENT	Working TEMP	-25℃~50℃					
	Storage TEMP.	-40℃~80℃10 ~ 95% RH					
	Working Humidity	20 ~ 95% RH non-condensing					
	Vibration	10~500Hz 2G 10min/1cycle period for 60min. each along X, Y, Z axes					
	TEMP. coefficient	±0.03%/℃ (0~50℃)					
SAFETY & EMC	Safety Standards	CE EN 61347-1, EN61347-2-13 Design refer to UL1310 Class 2, IP67 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC					
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25 / 70% RH					
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A					
OTHER	MTBF	600KHours MIL-HDBK-217F (25℃)					
	Dimension	58x28x21.6mm					
	Weight	65g					

Direct connecting to LEDs is not using additional drivers is highly recommended

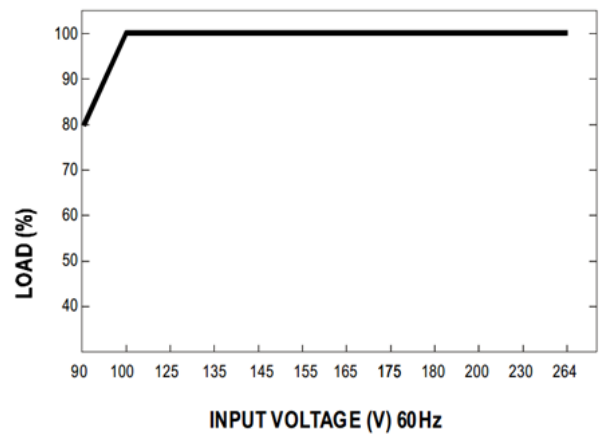
**Mechanical Specification**



**Derating Curve**



**Static Characteristics**



**Note:**

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltage. Please check the static characteristics for more details.
5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
7. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.