

56W Constant Current Four Outputs LED Driver

FEATURES

- High Efficiency
- Build-in Active PFC
- Four Channels Constant Current Output
- All-Round Protection: OVP, SCP, OTP
- Dimming Function Optional (0-10V、PWM、Timer)



WEC056/WED056/WEP056/WET056 SEREIS SPECIFICATIONS

Model	Output Current (±5%) (mA)	Output Voltage (V)	Efficiency		PF		No Load Output Voltage (±5%) (V)	Ripple & Noise (V)
			110V Input	220V Input	110V Input	220V Input		
WE*056-0350QW	350 * 4	13 ~ 40	84%	86%	0.99	0.96	47	0.3
WE*056-0400QW	400 * 4	12 ~ 35	84%	86%	0.99	0.96	42	0.3
WE*056-0450QW	450 * 4	10 ~ 31	83%	85%	0.99	0.96	38	0.2
WE*056-0480QW	480 * 4	9 ~ 29	83%	85%	0.99	0.96	38	0.2
WE*056-0550QW	550 * 4	8 ~ 25	83%	85%	0.99	0.96	32	0.2

- NOTE:**
1. All specifications are typical at 25°C unless otherwise stated.
 2. The “Efficiency” & “PF” values are measured at full load, after the unit is thermally stabilized, otherwise they will be lower about 1%.
 3. The “Ripple & Noise” values are measured by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor.

ELECTRICAL SPECIFICATIONS

	Parameter	Values	Conditions
INPUT	AC Voltage	90 ~ 305 Vac	Operating Voltage
	Frequency Range	47 ~ 63 Hz	
	AC Current (110V input)	0.62 A	Full load
	AC Current (220V input)	0.30 A	
	Inrush Current	35 A	Cold start, Vin=230V
	Leakage Current	0.5 mA	Vin=277V, 50Hz

OUTPUT	Top Output Power	56 W	
	Max. Output Channel	4	Each channel works separately, with rated output current of 350mA
	Set-up Delay Time	1 ~ 2 s	
	Line Regulation	1%	
	Load Regulation	3%	
PROTECT	Over Voltage Protect	1.3 Vo	±5% floating deviation Hiccup mode. The power supply shall return to normal operation only after the power is turn-on again.
	Short Circuit Protect		No damage shall occur when any output operating in a short circuit condition. The power supply shall be self-recovery when the fault condition is removed.
	Over Temp. Protect	110°C	

NOTE: 1. All specifications except “OTP” are measured at 25°C.

SAFETY & EMC COMPLIANCE

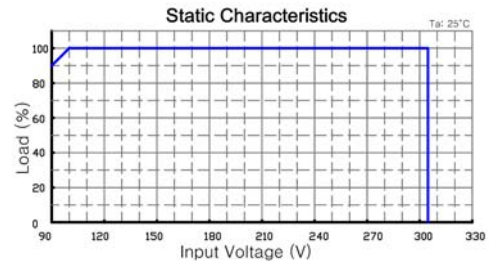
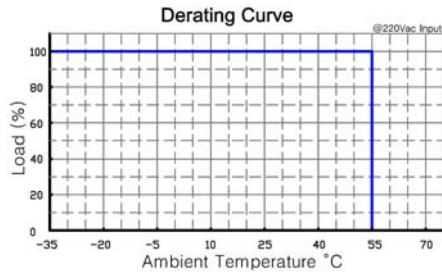
Parameter	Standards
Safety CE	EN61347-1, EN61347-2-13
EMI	EN55015
EMS	EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN61547

PRODUCTS INFORMATION

Parameter	Values
Working Temp., Humidity	-35°C ~ +55°C; 10 ~ 100% RH non-condensing
Storage Temp., Humidity	-40°C ~ +85°C; 5 ~ 100% RH
MTBF	470,000 hours
Life Time	85,000 hours
Dimension (L*W*H)	8.74(9.53)*1.61*1.17 inch
	222.0(242.0)*41.0*29.8 mm
Net Weight	455 g

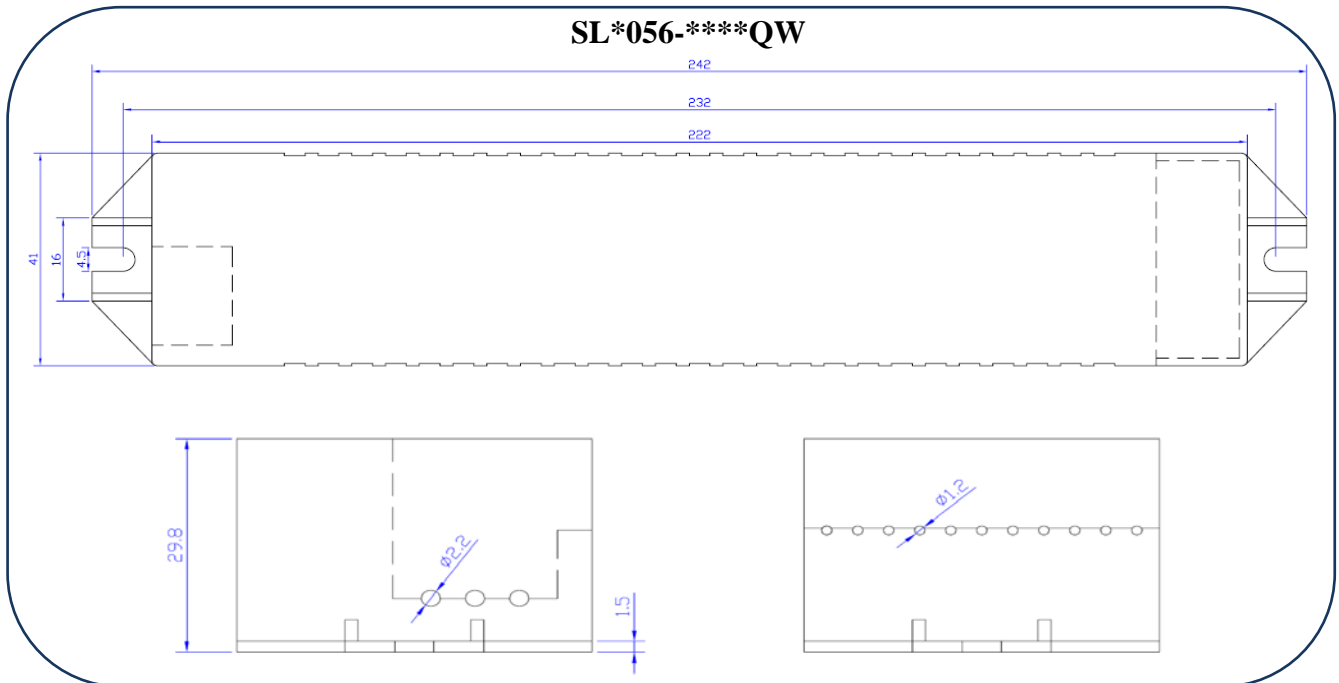
APPLICATION NOTES

I DERATING CHARACTER



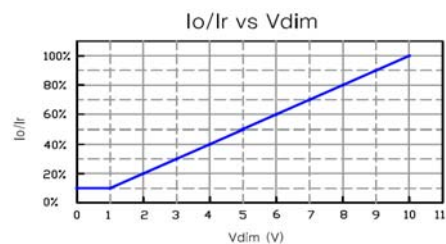
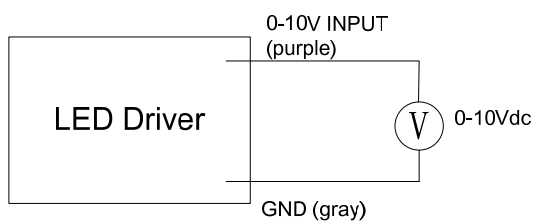
MECHANICAL SPECIFICATIONS

ENCAPSULATION I

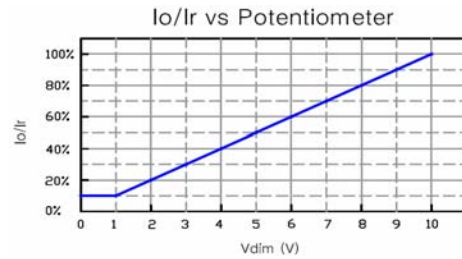
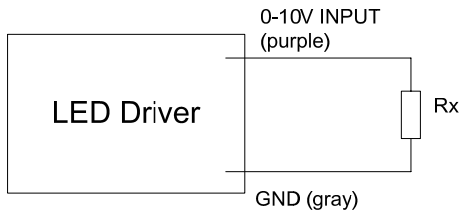


DIMMING FUNCTION

I 0-10V ANALOG DIMMING – for SLD***-**** MODELS



Mode 1 : 0-10Vdc Input on Dimming Control

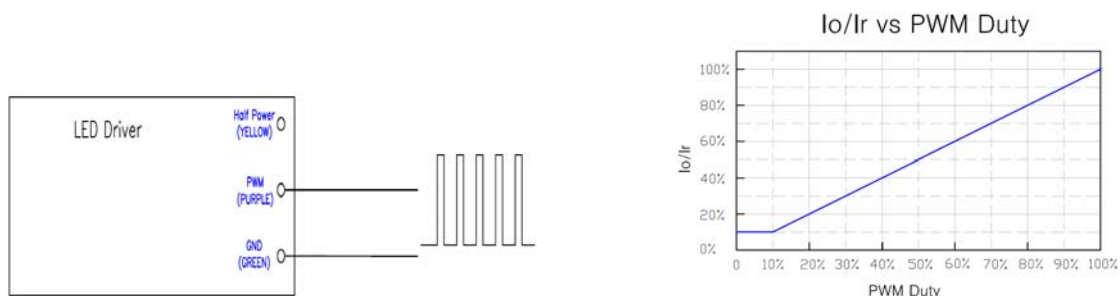


Mode 2 : External Resistor on Dimming Control

Parameter	Values	Conditions
Absolute Max. Voltage	0 ~ 12 V	Normal 10~11V
0-10V Input Source Current	0 ~ 10 mA	

- NOTE:**
- 1.If the dimming function is not used, short 10V output pin (yellow) and 0-10V input pin (purple).
 2. I_o is actual output current and I_r is rated current without dimming control.
 3. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold, proximally 50% of the max. output voltage for any given mode.
 4. The dimming signal is allowed to be less than 1V, when it for 0-1V, the output current can maintain about 10% I_r , however, the connected LEDs may flicker. Keeping dimming voltage greater than 1V in application is strongly recommended.
 5. Do not connect the GND of dimming to the output. Otherwise, the LED driver can not work normally.

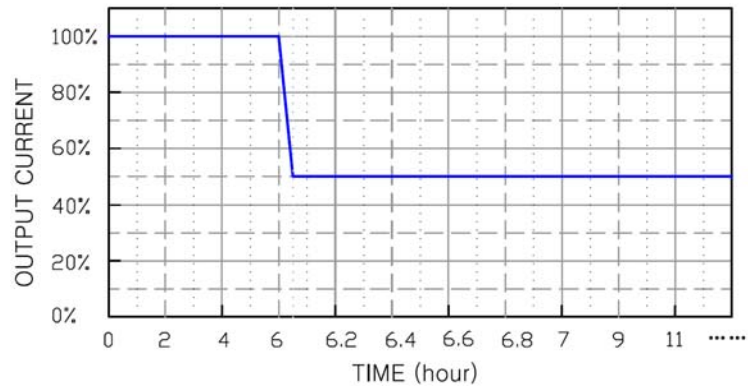
II PWM DIMMING– for SLP***-**** MODELS



Parameter	Values	Conditions
Input Voltage	0~10 V	Purple wire.
Input Current	10 mA	
PWM Frequency	0.5 ~ 3 kHz	
PWM Pulse Width	10%~100%	

- NOTE:**
1. Pulse width less than 10% will cause the driver working unsteadily.

III TIMER DIMMING for SLT***-**** MODELS



NOTE: 1.The dimming time of the chart is for reference only, it can be adjusted according to the client's requirement.