

F50-C7 Series

50W single output with c.c circuit and PFC function



- **Constant current design**
- Built-in PFC function
- Protections: Over current / Over voltage / Short circuit
- IP68 design for outdoor installations
- 100% full load burn-in test
- 3 in 1 dimming function(option:D type)
- Suitable for LED lighting and street & tunnel lighting applications
- Safety standards : K61347-2,1,K61347-2-13
- EMC standards : K00015,K61547
- Metal case

UPF50S60-C7D

Blank : IP68 rated. Cable for I/O connection.
 Output current level can be adjusted through internal potentiometer
 D(option) : IP68 rated. Constant current level adjustable through output cable with 10V PWM signal or 1-10Vdc or resistance



ITEM		UPF50S60-C7□
INPUT	VOLTAGE RANGE	AC180~264V
	FREQUENCY RANGE	47~63Hz
	POWER FACTOR	PF>0.95 at over 60% of rated power
	EFFICIENCY(typ.)	89%
	AC CURRENT(typ.)	0.23A/230VAC(typ)
	INRUSH CURRENT(typ.)	COLD START 5A/230VAC
	LEAKAGE CURRENT	<2.5mA / 230VAC
OUTPUT	RATED CURRENT	700mA
	CONSTANT CURRENT REGION	42-70V
	RATED POWER	50W
	REPPLE & NOISE(max.)	2Vp-p
	CURRENT ACCURACY	±5%
	SETUP,RISE TIME(max.)	3000ms,100ms/230VAC at full load
HOLD UP TIME(typ.)	100ms/230VAC at full load	
PROTEC-TION	OVER CURRENT Note2	Over 95~108% of rating ; recovers automatically after fault condition is removed
	SHORT CIRCUIT	Hiccup mode ; recovers automatically after fault condition is removed
	OVER VOLTAGE	110~140% of rating
ISOLA-TION	WITHSTAND VOLTAGE	I/P-O/P:AC3.75KV, I/P-F.G:AC2KV, O/P-F.G:AC1.5KV
	ISOLATION RESISTANCE	I/P-O/P, I/P-F.G, O/P-F.G:DC500V 100Mohms(At room temp. & humid.)
ENVIRON-MENT	WORKING TEMP.&HUMID.	-40~+70℃ (Refer to "DERATING CURVE),20~95%RH
	STORAGE TEMP.&HUMID.	-40~+80℃,10~95%RH
	VIBRATION	10~500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
OTHERS	DIMENSION/WEIGHT	200*61.5*36.8mm(L*W*H)/0.67Kg

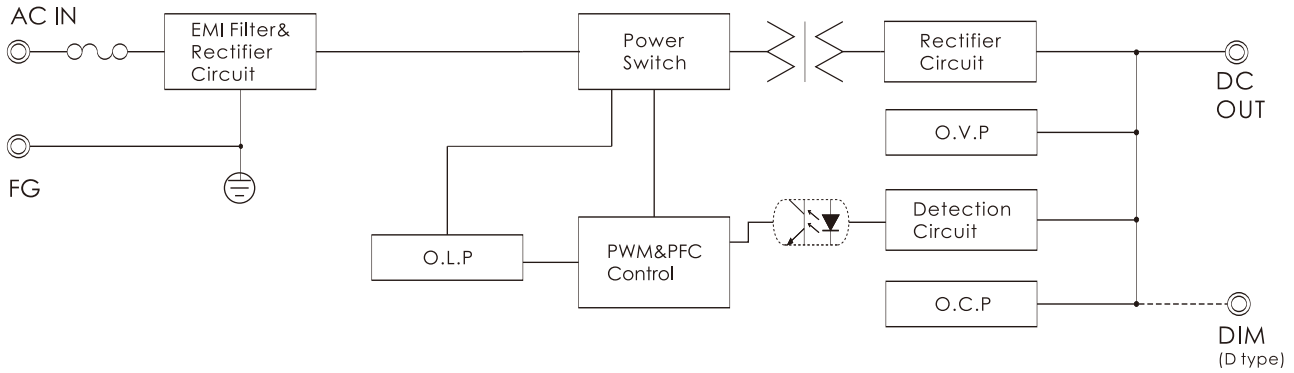
NOTE
 1. All parameters not specially mentioned are measured at 230vac input, rated load and 25℃ of ambient temperature.
 2. Refer to "DRIVING METHODS of LED MODULE"

S.M.P.S

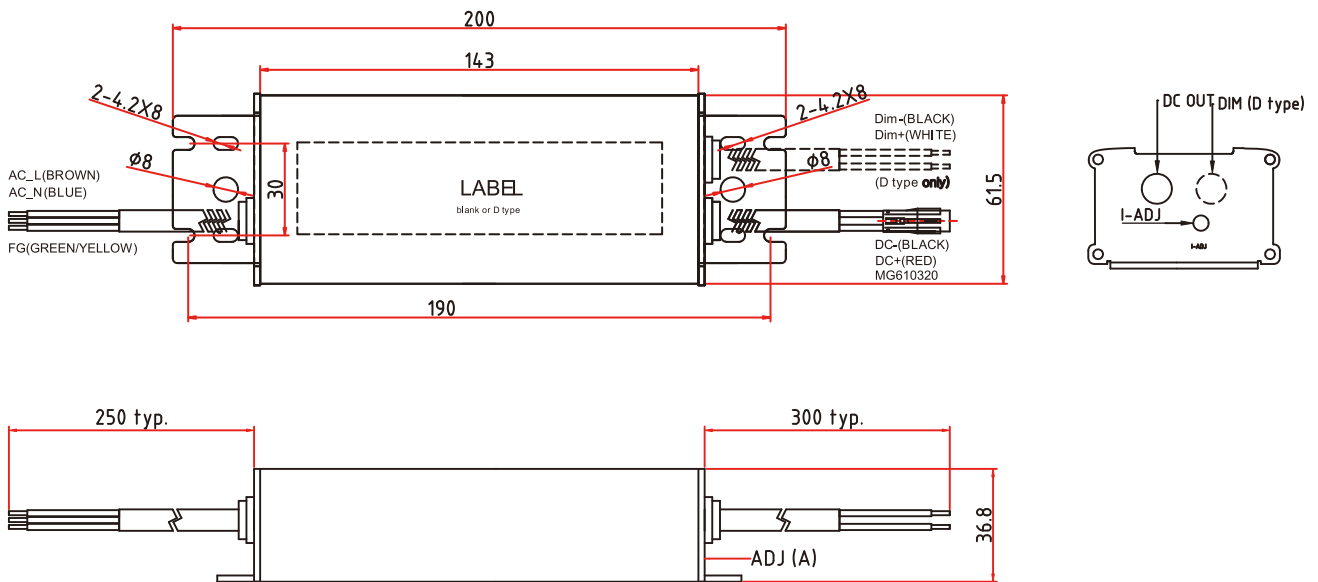
LED Converter

Water Proof Converter

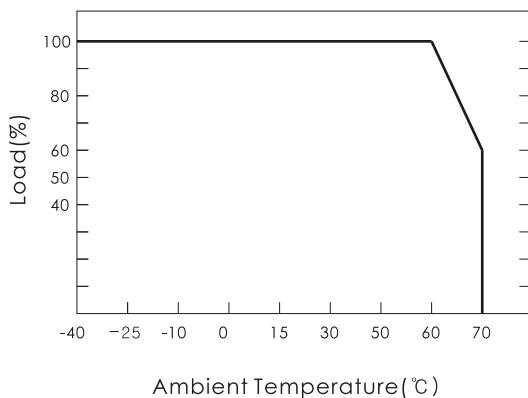
■ BLOCK DIAGRAM



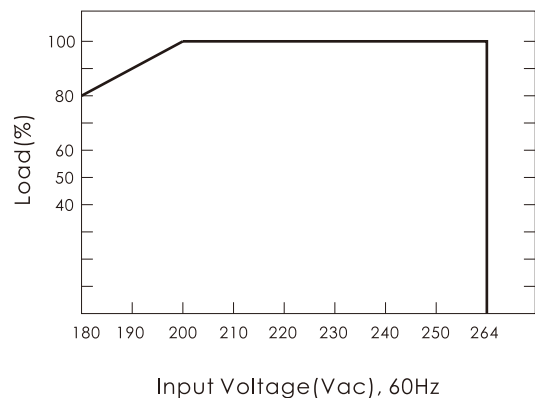
■ DIMENSIONS (unit:mm)



■ DERATING CURVE

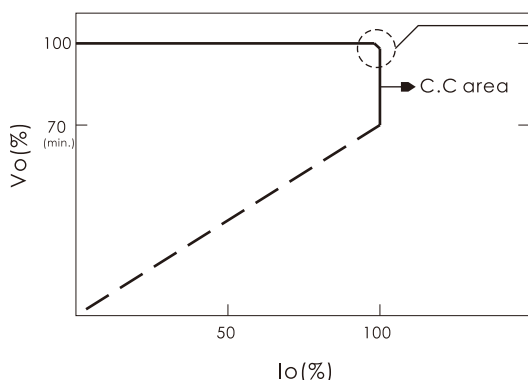


■ STATIC CHARACTERISTICS



DRIVING METHODS of LED MODULE

- This series works in constant current mode to directly drive the LEDs



In the constant current region, the highest voltage at the output of the driver depends on the configuration of the systems.

DIMMING OPERATION(option:D type)

- Built-in 3 in 1 dimming function.**
Output constant current level can be adjusted through output cable by connecting 10V PWM signal or 1-10Vdc or resistance between DIM+ and DIM-.
- Please do not connect 'DIM-' to 'V-'
- 10V PWM signal for output current adjustment(typ.):
frequency range:100Hz~3KHz

Duty Value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Open
Percent of Rated Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%

- 1-10V dimming function for output current adjustment(typ.)

Dimming Value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	Open
Percent of Rated Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%

- Reference resistance value for output current adjustment(typ.)

Resistance Value	Single driver	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	Open
	Multiple driver (N=driver quantity for synchronized dimming operation)	10KΩ /N	20KΩ /N	30KΩ /N	40KΩ /N	50KΩ /N	60KΩ /N	70KΩ /N	80KΩ /N	90KΩ /N	100KΩ /N	---
Percent of Rated Current		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%