

SPECIFICATION

Product Name: Sensor DIM LED Driver

Model No.: MLC20C-PS2 / MLC40C-PS / MLC60C-PS

Issue Date: 2022-12-29

CUSTOMER APPROVED

PRODUCT DIRECTOR APPROVED	P&M APPROVED	R&D CHECKED	PREPARED
			

Version	Product No.	Updating Reason	Stage	Date
A0	MLC20C-PS2 MLC40C-PS MLC60C-PS	First version		2022-10-12
A1	MLC20C-PS2 MLC40C-PS MLC60C-PS	Update Sensor head		2022-12-29

1. Features

1. Linear metal housing isolated dimmable LED drive, flicker-free, PWM dimming.
2. Multi current optional via DIPs, with PWM control interface.
3. Match different microwave sensors or wireless intelligent modules.
4. Meet CE/TUV/CCC/SAA certificates and ERP requirements.



2. Sensor head



MC131D A&B



MC137D A&B



MC068D



MC087D 1



MC087D RC



MC002D 6



MLC20C-PS1-1

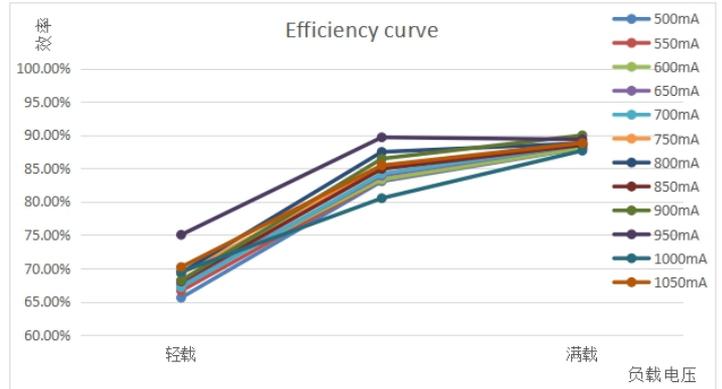
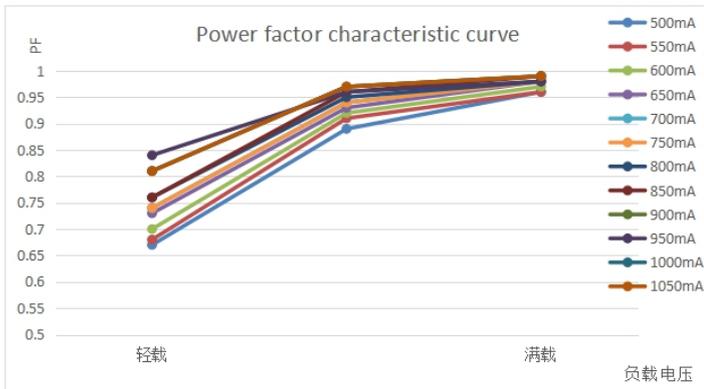
3. Parameter

Product series		MLC20C-PS2	MLC40C-PS	MLC60C-PS
Input	Input current	≤0.13A @230VAC full load	≤0.23A @230VAC full load	≤0.32A @230VAC full load
	Rated voltage	220-240V AC 50Hz/60Hz		
	Stand-by power	≤0.5W		
	Power factor	≥0.95(@230V Max load)	≥0.95 (@230V Max load)	≥0.95 (@230V Max load)
	Working efficiency	≥83% (@230V Max load)	≥85% (@230V Max load)	≥87% (@230V Max load)
	THD	≤20%(@230V Max load)		
	Leak current	<0.5mA/240V		
	Inrush current	<15A (100us half-current) @230V AC	≤20A (100us half-current) @230V AC	≤30A (100us half-current) @230V AC
Output	Working model	CC		
	Type of load	LED		
	Flick	≤2%		
	Constant current accuracy	Constant current accuracy ±5%		
	No-load output voltage	60VDC Max	60VDC Max	70VDC Max
	Full load power	20W Max	40W Max	60W Max
	Load current	300mA/350mA :9-42V 400mA/450mA/450mA:9-42V 500mA:9-40V 550mA:9-36V 600mA:9-32V 650mA:9-30V 700mA:9-28V	450mA/500mA/550mA 600mA/650mA/700mA 750mA/800mA/850mA 900mA	500mA/550mA/600mA 650mA/700mA/750mA 800mA/850mA/900mA 950mA/1000mA/1050mA
	Load output voltage range	9-42V DC	9-45V DC	9-56V DC
Interface	PWM control interface	PWM (3.3V 5V)		
	Connection mode of interface end	3pin terminal		

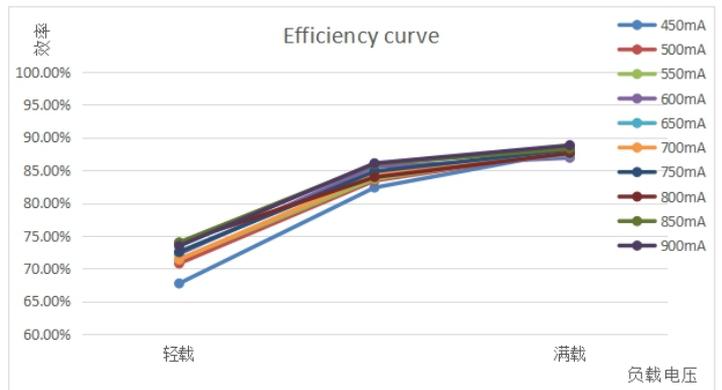
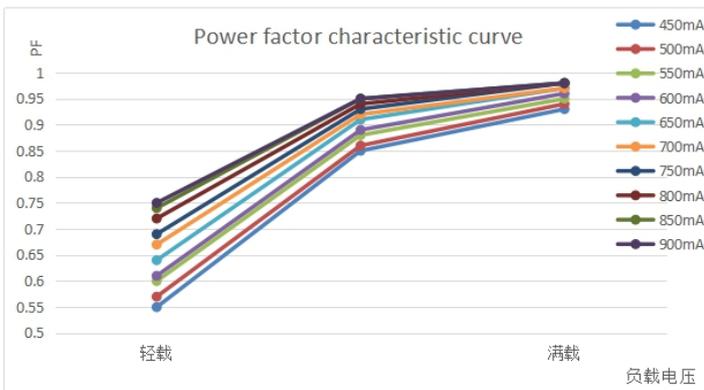
Auxiliary driver parameters	Voltage	8.5±1V		
	Current	25mA max		
Abnormality Protection Requirements	Input overvoltage protection	Yes, self-recovery		
	Input no-load protection	Yes, self-recovery		
	Input short-circuit protection	Yes, self-recovery		
Environmental requirements	Operating temperature	-25...+50°C		
	Maximum shell temperature(Tc)	85°C		
	Storage temperature/humidity	-40°C...+80°C Humidity: ≤85% (non-condensation)		
Certificate Standards	Safety standards (LVD)	EN61347-1, EN61347-2-13		
	EMC standards	EN55015, EN61547, EN61000-3-2, EN61000-3-3		
	Surge	L N: 1KV (different mode) L N to ground 2KV (common mode)		
	Withstand voltage	Primary to secondary: 3000VAC; Primary to ground :1500VAC	Primary to secondary: 3000VAC; Primary to ground :1500VAC	Primary to secondary: 3000VAC; Primary to ground :1500VAC
	Environmental requirement	RoHS		
	Certificate	CE \ SAA		
	Wiring method	Press terminal, wire diameter: 0.5-1.0mm ²		
	IP Rating	IP20		
	Protection class	Class I		
	Installation	Built-in		
	Package	PE bag clapboard, carton (K=A)		
	Installation size	195mm*30mm*20.5mm	195mm*30mm*20.5mm	243*30*21.5mm
	Net weight	113.5±3g	140±3g	200±3g
Lifetime	5 years warranty@Ta 230V full load			

4. Product characteristic test

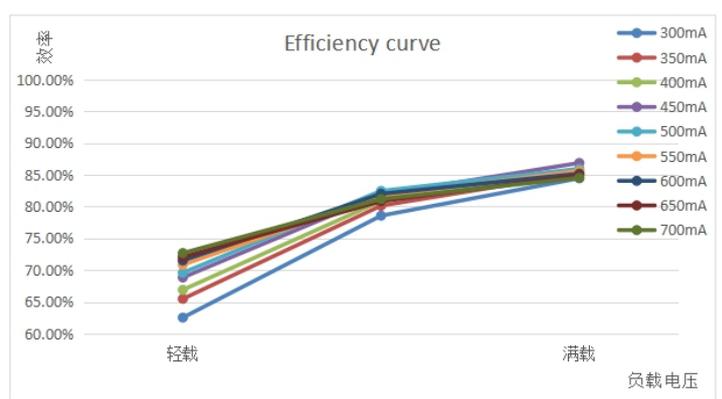
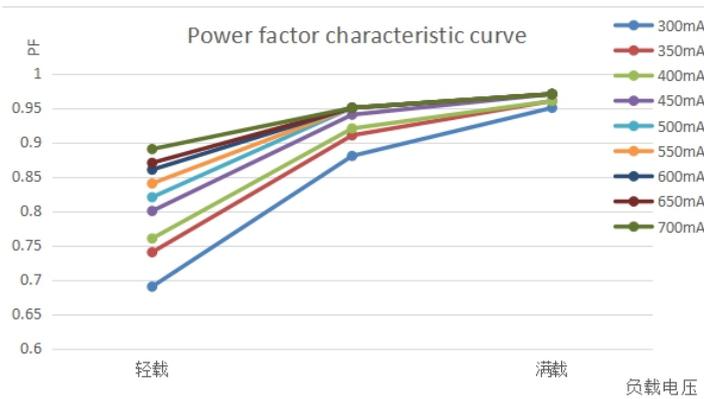
MLC60C-PS



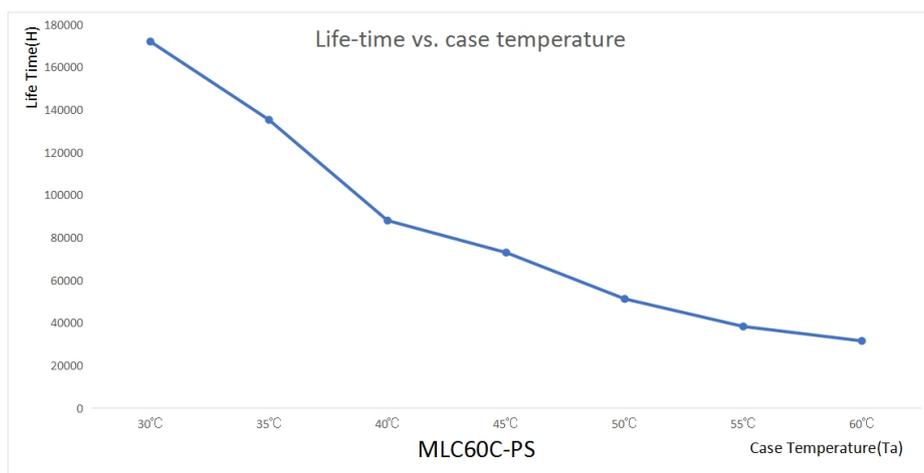
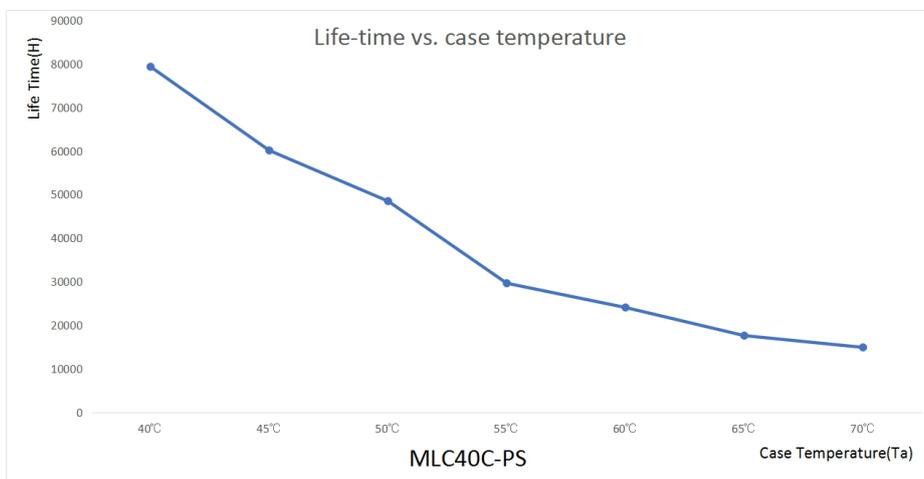
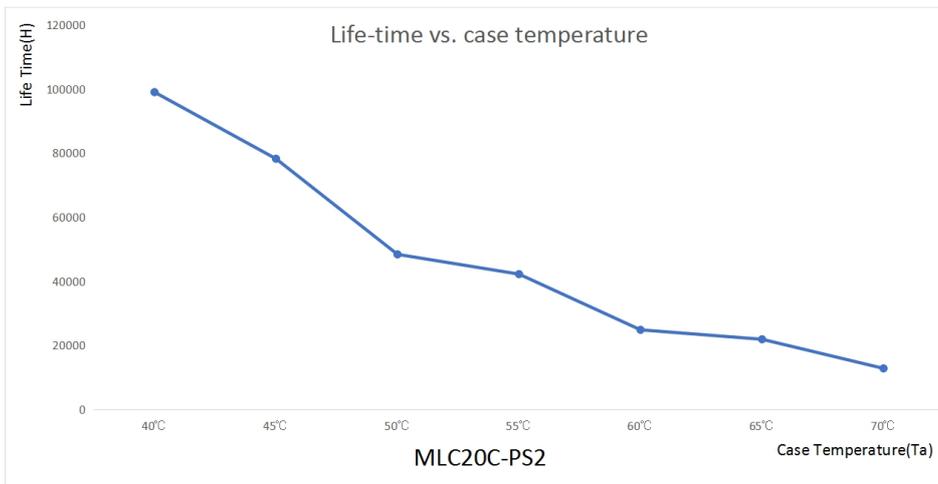
MLC40C-PS



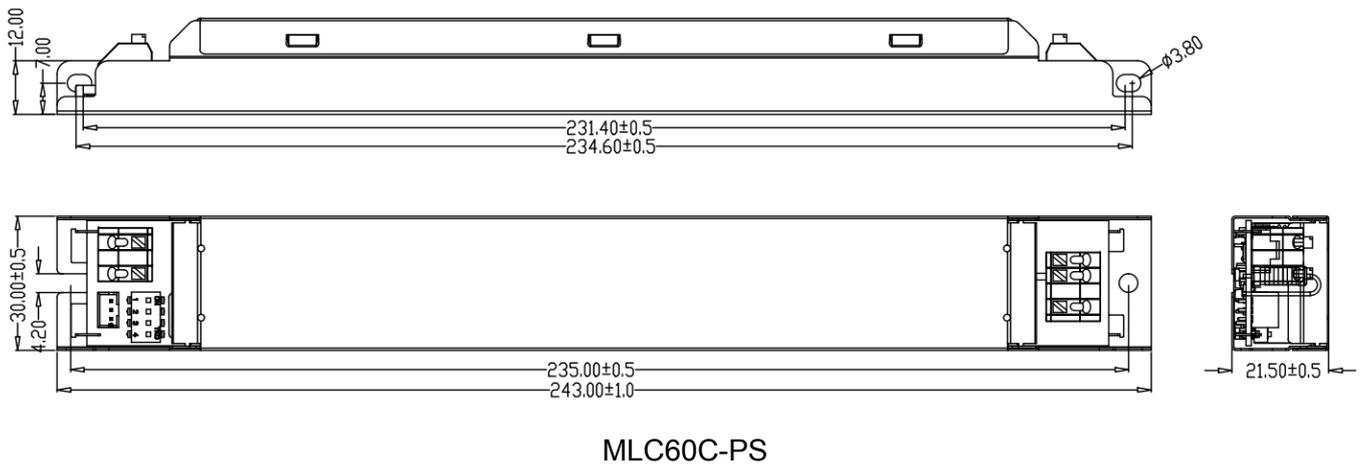
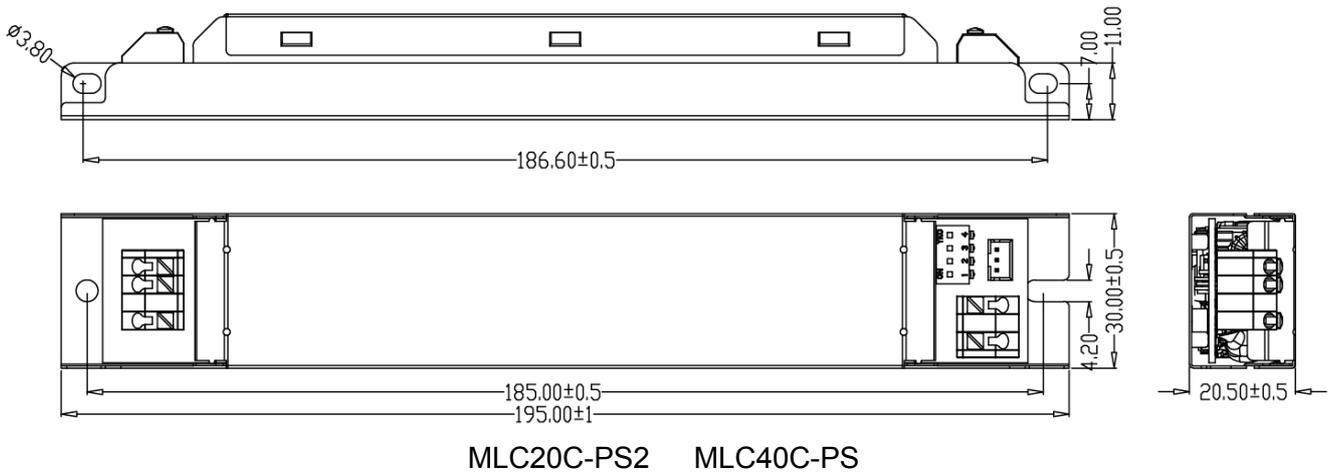
MLC20C-PS2



Lifetime curve



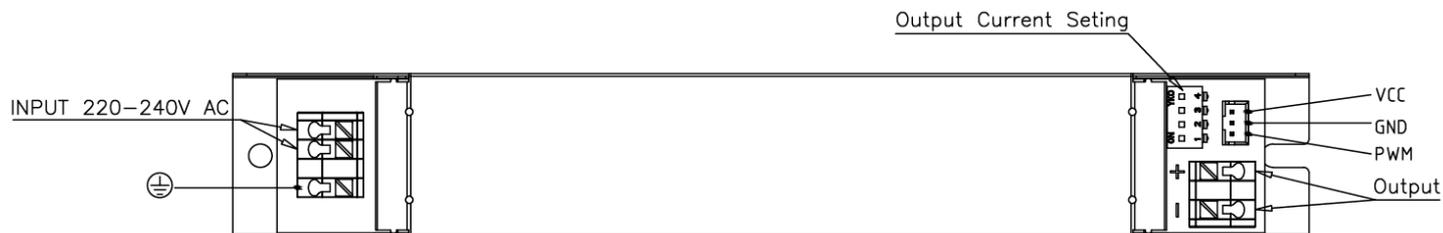
5. Dimension (mm)



6. Wiring



7. Structure



8. DIP Switch Setting

MLC60C-PS current gear settings

I rated (CC)	Load voltage	S1	S2	S3	S4
500mA	9-56V	-	-	-	-
550mA	9-56V	-	-	-	ON
600mA	9-56V	-	-	ON	-
650mA	9-56V	-	-	ON	ON
700mA	9-56V	-	ON	ON	ON
750mA	9-56V	-	ON	ON	-
800mA	9-56V	-	ON	ON	ON
850mA	9-56V	ON	-	ON	ON
900mA	9-56V	ON	-	ON	ON
950mA	9-56V	ON	ON	-	ON
1000mA	9-56V	ON	ON	ON	-
1050mA	9-56V	ON	ON	ON	ON

MLC40C-PS current gear settings

I rated (CC)	Load voltage	S1	S2	S3	S4
450mA	9-45V	-	-	-	-
500mA	9-45V	-	-	-	ON
550mA	9-45V	-	-	ON	-
600mA	9-45V	-	-	ON	ON
650mA	9-45V	-	ON	-	ON
700mA	9-45V	-	ON	ON	-
750mA	9-45V	-	ON	ON	ON
800mA	9-45V	ON	ON	-	ON
850mA	9-45V	ON	ON	ON	-
900mA	9-45V	ON	ON	ON	ON

MLC20C-PS2 current gear settings

I rated (CC)	Load voltage	S1	S2	S3	S4
300mA	9-42V	-	-	-	-
350mA	9-42V	-	-	-	ON
400mA	9-42V	-	-	ON	-
450mA	9-42V	-	-	ON	ON
500mA	9-40V	-	ON	ON	-
550mA	9-36V	-	ON	ON	ON
600mA	9-32V	ON	-	ON	ON
650mA	9-30V	ON	ON	ON	-
700mA	9-28V	ON	ON	ON	ON

9. Initialization

When powered on, it is steady on. When the sensor is configured, it changes according to the status of the sensor.

10. Factory Setting

Adjust the corresponding current gear according to the order or customer demand.

11. Application Notice

1. Please use this product in accordance with the specifications. Failure may occur if the product is used beyond the use conditions.
2. The product should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switches.
3. After the LED drive input is powered off, there will be residual voltage at the output end, which can be maintained for about 3 minutes.