

# MPLC-12 series

12W Constant current single output LED power Supply



## ■ Features:

- Constant current design
- Built in active PFC (PF≥0.8)
- Protection: Shortcircuit / Overtemperature
- Free air convection cooling
- Full load burn in test
- IP20 protection



## ELECTRICAL SPECIFICATION

MODEL	MPLC-12-350	MPLC-12-700
<b>OUTPUT</b>		
Rated current	350mA	700mA
No load voltage	40VDC	21VDC
Voltage range	17 ÷ 34VDC	9 ÷ 17VDC
Rated power	11.9W	11.9W
Load regulation	± 5%	
Line regulation	± 5%	
Tolerance [3]	± 5%	
Ripple & Noise (max.) [2]	100mV <sub>p-p</sub>	140mV <sub>p-p</sub>
Set up time	<1s	
Maximum number of LED in string	10 (V <sub>f</sub> ≤ 3.4V)	5 (V <sub>f</sub> ≤ 3.4V)
<b>INPUT</b>		
Voltage range	176 ÷ 264VAC	
Frequency Range	50/60Hz	
Efficiency (typ.)	83%	82%
AC current(typ.)	0.09A / 230VAC	
Inrush current (typ.)	10A / 230VAC	
Power Factor (PF)	PF≥0.8 / 230 @ full load	
No load power consumption	≤0.3W	
Leakage current	<0.5mA	
<b>PROTECTION</b>		
Shortcircuit	Type: Hiccup, Auto recovery.	
Overtemperature	Range: 165°C ± 10°C	
	Type: shut off output current. Auto recovery	

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## ENVIRONMENT

<b>Working temperature</b>	-30°C ÷ 70°C (Refer to derating curve)
<b>Humidity</b>	20 ÷ 90% RH (non condensing)
<b>Storage temperature and humidity</b>	-40°C ÷ 60°C, 10 ÷ 95% RH (non condensing)

## SAFETY and EMC

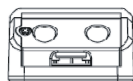
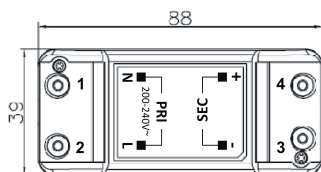
<b>Withstand voltage</b>	I/P – O/P: 3kVAC
<b>Safety standards</b>	Compliance to EN61347-1, EN61347-2-13, EN60598-1, EN60598-2-6
<b>EMC emission</b>	Compliance to EN55015
<b>EMC immunity</b>	Compliance to EN61547
<b>Harmonic current</b>	Compliance to EN61000-3-3; EN61000-3-2
<b>Isolation resistance</b>	I/P - O/P: 4MΩ

## Others

<b>Dimension (L x W x H)</b>	88 x 39 x 22.5mm
<b>Weight</b>	60g

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

## MECHANICAL SPECIFICATION



### Terminal Pin No. assigment

	Pin No.	Assignment
Input	1	AC/N
	2	AC/L
Output	3	V-
	4	V+

## DERATING CURVE

