

# AC/AC EMC Filter LC-30W1D Series



#### **Typical Features**

- ◆ Wide input voltage range 85-305VAC
- ◆ Meet EMI CISPR22/EN55032 Class B adapted with power supply
- ◆ Operating temperature from -40°C to +85°C
- ◆ Conform to CE & RoHS regulation
- ◆ Compact size, Industrial grade design
- ◆ PCB DIP Mounting



#### **Application Field**

**LC-30W1D Series** are modular filters which can be adapted with the AC-DC power supplies to improve the EMI noise and to suppress the surges. The maximum input voltage of the adapted AC-DC power supply should be less than the maximum operating voltage of this filter, the maximum input current of the AC-DC power supply should be less than the filter rated operating current.

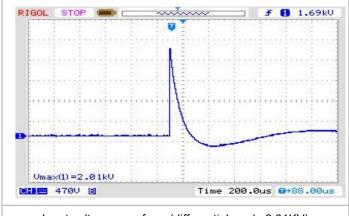
#### **Typical Product List**

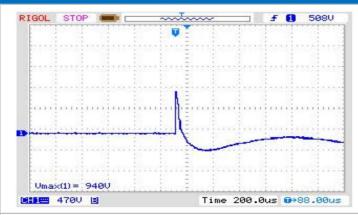
Part No.	Input voltage Range (VAC)	Max Rated Current (A)
LC-30W1D-1	85 - 305	1.0
LC-30W1D-2	85 - 305	1.0

### **General Performances**

Item	Operating Condition	Min.	Тур.	Max.	Unit	
Operating Temperature		-40		+85	°C	
Storage Temperature		-55		125		
Soldering Temperature	Wave soldering	260±4°C, time 5-10S				
	Manual soldering	360 ±8°C, time 4-7S				
Case temperature rise	220VAC@0.5A			6°	017	
during operation	220VAC@1.0A	22°		- °K		
Insulation Voltage	Line-GND, Test 1 min, leakage current ≤5mA		2000		VAC	
Unit Weight		30g (Typ)				

#### **EMC Performance**





Input voltage waveform (differential mode 2.01KV)

Output voltage waveform (differential mode 0.94KV)



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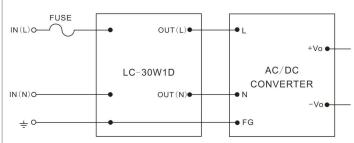


#### **Application recommendation**

#### 1. Internal Schematic

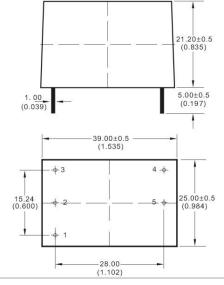
# IN (L)O MOV CX LDM CY1 CY2

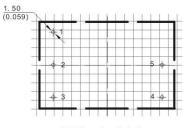
#### 2. Typical Application Circuit



#### **Mechanical Dimensions**

#### 1. LC-30W1D-1





PCB layout vertical view Grid 2.54x2.54 (0.10x0.10)

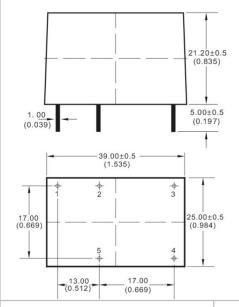
Note:

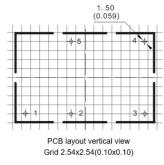
Unit: mm (inch)

Pin diameter tolerance:  $\pm 0.10$  ( $\pm 0.004$ ) General tolerance:  $\pm 0.50$  ( $\pm 0.020$ )

Pin No.	Description
1	GND
2	IN(N)
3	IN(L)
4	OUT (L)
5	OUT (N)

#### 2. LC-30W1D-2





Note:

Unit: mm (inch)

Pin diameter tolerance:  $\pm 0.10$  ( $\pm 0.004$ ) General tolerance:  $\pm 0.50$  ( $\pm 0.020$ )

Pin No.	Description
1	GND
2	IN(N)
3	IN(L)
4	OUT (L)
5	OUT (N)

Packaging Code	Dimensions L x W x H	
D	39.00X25.00X21.20 mm	1.535X0.984X0.835 inch



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