

**FEATURES:**



- Input: 85-305VAC, 47-63Hz or 70-430VDC
- Operating temperature -40°C to +85°C
- Low power consumption  $\leq 0.3W$
- Continuous short circuit protection
- I/O Isolation 3000VAC
- Ultra slim open frame SIP
- Over current protection
- Class II power supply

**Models**  
**Single output**



Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Output Current max (mA)	Maximum capacitive load ( $\mu F$ )	Efficiency (%)
AMEOF1-5SJZ ✘	85-305/47-63	70-430	5	200	220	66
AMEOF1-9SJZ	85-305/47-63	70-430	9	111	100	67
AMEOF1-12SJZ	85-305/47-63	70-430	12	83	100	70
AMEOF1-15SJZ	85-305/47-63	70-430	15	67	100	69
AMEOF1-24SJZ	85-305/47-63	70-430	24	42	100	68
AMEOF1-5SLJZ	85-305/47-63	70-430	5	200	220	66
AMEOF1-9SLJZ	85-305/47-63	70-430	9	111	100	67
AMEOF1-12SLJZ	85-305/47-63	70-430	12	83	100	70
AMEOF1-15SLJZ	85-305/47-63	70-430	15	67	100	69
AMEOF1-24SLJZ	85-305/47-63	70-430	24	42	100	68

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

For models marked with ✘ will be discontinued (EOL).

- Model AMEOF1-5SJZ will be discontinued; for new designs, please refer to model AMEOF13-5S277HANZ.

**Input Specifications**

Parameters	Conditions	Typical	Maximum	Units
Current	115VAC		120	mA
	277VAC		60	mA
Inrush current <2ms	115VAC	9		A
	277VAC	15		A
External fuse	Recommended slow blow type	1		A
Input dissipation	No Load, 24V output	0.2	0.3	W
	No Load, others	0.15	0.25	W

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Full load, 5V output		$\pm 8$	%
	Full load, others		$\pm 5$	%
Line regulation	Full load	$\pm 1.5$		%
Load regulation	5% - 100% load, 24V output	$\pm 6$		%
	5% - 100% load, others	$\pm 3$		%
Ripple & Noise	20MHz Bandwidth	50	120	mV p-p
Hold-up time (min)	230VAC	180		ms
Minimum load		5		% of Max

**Isolation Specifications**

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		3000	VAC

### General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		100		KHz
Over current protection	Auto-recovery	110-500		% of I out
Short circuit protection		Continuous, auto recovery		

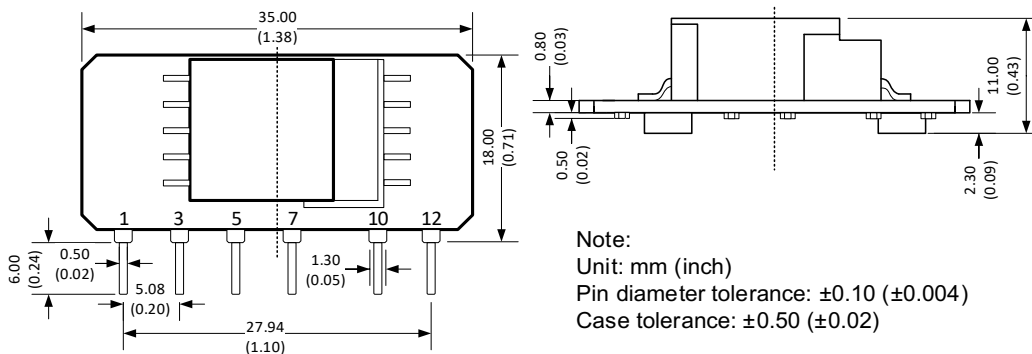
### General Specifications (Continued)

Parameters	Conditions	Typical	Maximum	Units
Operating temperature	Without derating	-40 to +85		°C
Storage temperature		-40 to +105		°C
Temperature coefficient		±0.15		% / °C
Cooling	Free air convection			
Humidity			85	% RH
Weight		6		g
Dimensions (L x W x H)		1.38 x 0.71 x 0.43 inches	35 x 18 x 11 mm	
MTBF		>200,000 hours (MIL-HDBK -217F, t=+25°C)		

### Safety Specifications

Parameters		
Agency approvals	UL 60950-1	
Standards	IEC 60950-1, Design to meet EN60335 (With the EN60335 recommended circuit)	
	EMC - Conducted and radiated emission	CISPR32 / EN55032 Class A, (With typical application circuit, EMI Class A circuit) CISPR32 / EN55032 Class B, (With EMI Class B circuit)
	Electrostatic Discharge Immunity	IEC 61000-4-2 Contact ±4KV, Criteria B
	RF, Electromagnetic Field Immunity	IEC 61000-4-3 10V/m, Criteria A
	Electrical Fast Transient/Burst Immunity	IEC 61000-4-4 ±2KV, Criteria B (With typical application circuit, EMS Class III circuit) IEC 61000-4-4 ±4KV, Criteria B (With EMS Class IV circuit)
	Surge Immunity	IEC 61000-4-5 L-L ±1KV, Criteria B (with typical application circuit, EMS Class III and EMI Class A circuit)
		IEC 61000-4-5 L-L ±2KV, Criteria B (with EMS Class IV and EMI Class A circuit)
		IEC 61000-4-5 L-L ±1KV, L-G ±2KV, Criteria B (with EMS Class III and EMI Class B circuit) IEC 61000-4-5 L-L ±2KV, L-G ±4KV, Criteria B (with EMS Class IV and EMI Class B circuit)
	RF, Conducted Disturbance Immunity	IEC 61000-4-6 10Vr.m.s, Criteria A
	Voltage dips, Short Interruptions Immunity	IEC 61000-4-11 0%, 70%, Criteria B

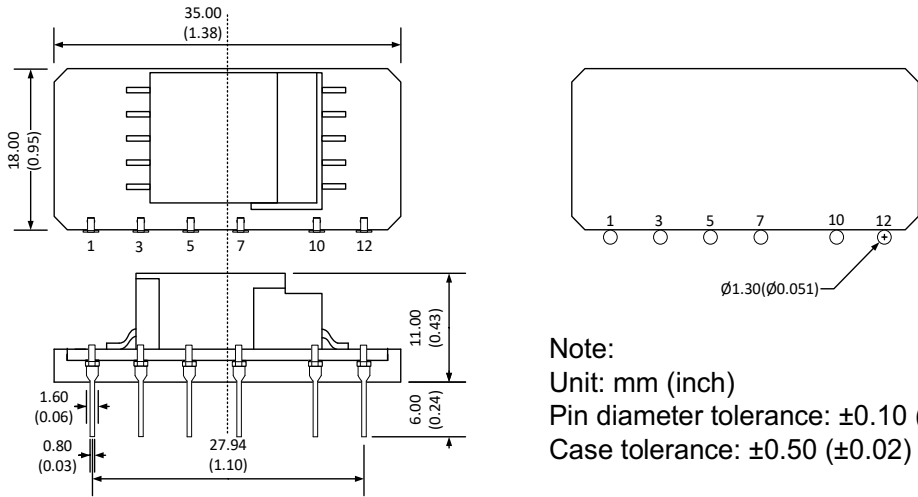
### Dimensions



### Pin Out Specifications

Pin	Single
1	AC N
3	AC L
5	+V sc
7	-V sc
10	-V Output
12	+V Output

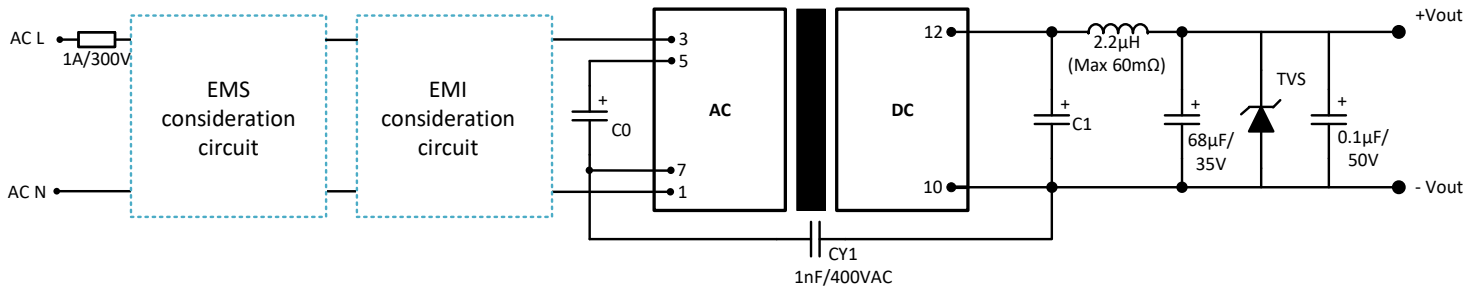
### L Model Dimensions



Note:  
Unit: mm (inch)  
Pin diameter tolerance:  $\pm 0.10$  ( $\pm 0.004$ )  
Case tolerance:  $\pm 0.50$  ( $\pm 0.02$ )

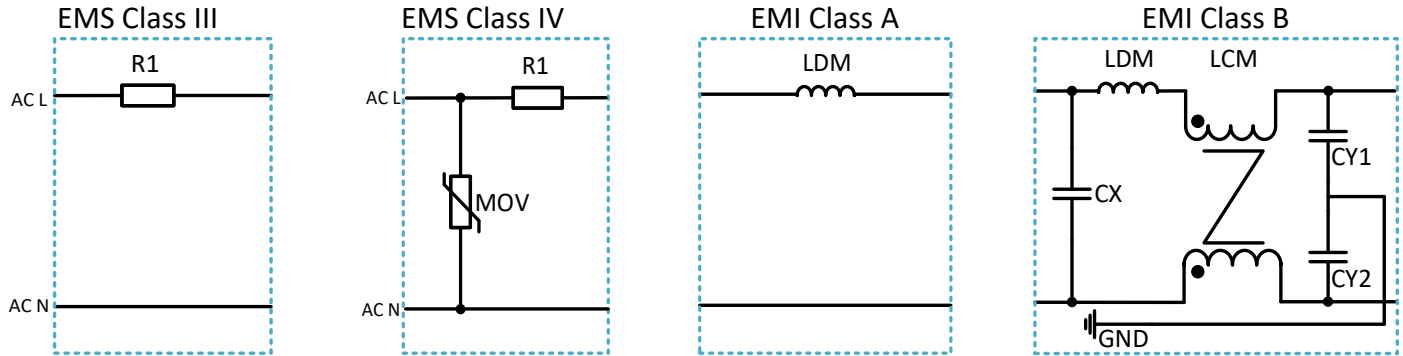
- Note:
1. Capacitor between pin5 and pin7 is necessary.
  2. External circuit on the output side is necessary. Please refer to the recommended circuit.
  3. It is needed to have distance  $\geq 6.4\text{mm}$  for safety between external components in primary circuit and secondary circuit.
  4. The layout of the device is for reference only, please refer to the actual product.

### Recommended EMC external circuit



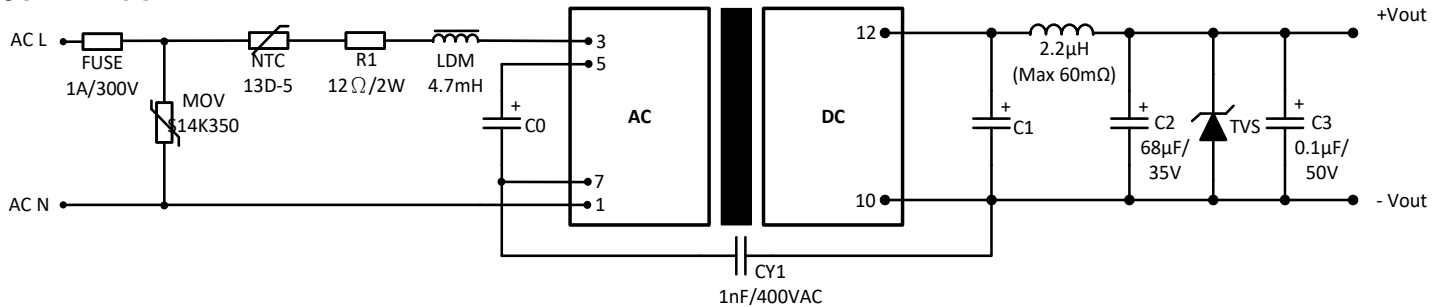
Model	C0	C1	TVS
5 VDC output	4.7μF/450V (-20°C to +85°C)	270μF/16V (Solid capacitor)	7V
9 VDC output		100μF/16V (Solid capacitor)	12V
12 VDC output	10μF/450V (-40°C to +85°C)	100μF/16V (Solid capacitor)	20V
15 VDC output		100μF/35V	20V
24 VDC output		100μF/35V	30V

### EMI & EMS Recommended Circuit

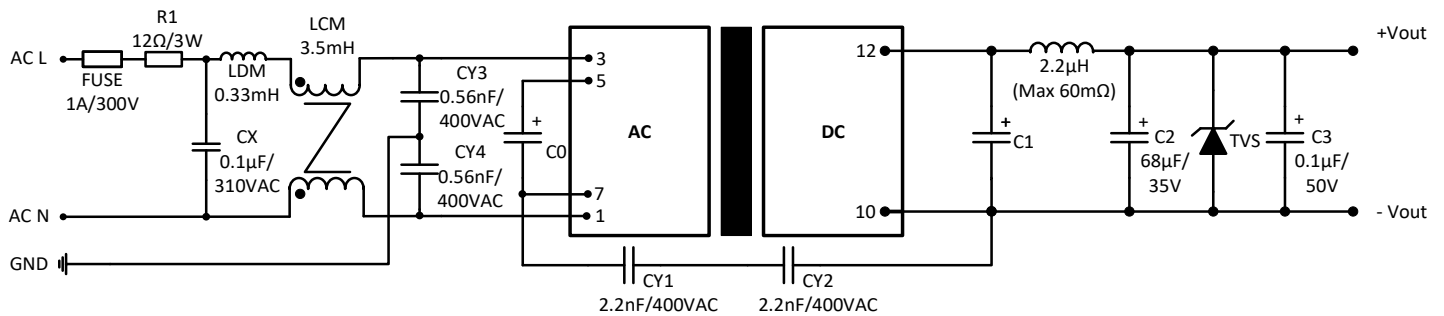


Component	EMS		EMI	
	Class III	Class IV	CLASS A	CLASS B
MOV	-	S14K350	-	-
R1	12Ω/3W	12Ω/3W	-	-
CX	-	-	-	0.1μF/310VAC
CY1	-	-	-	0.56nF/400VAC
CY2	-	-	-	0.56nF/400VAC
LCM	-	-	-	3.5mH
LDM	-	-	4.7mH	0.33mH
FUSE	1A/300V	2A/300V	1A/300V	1A/300V

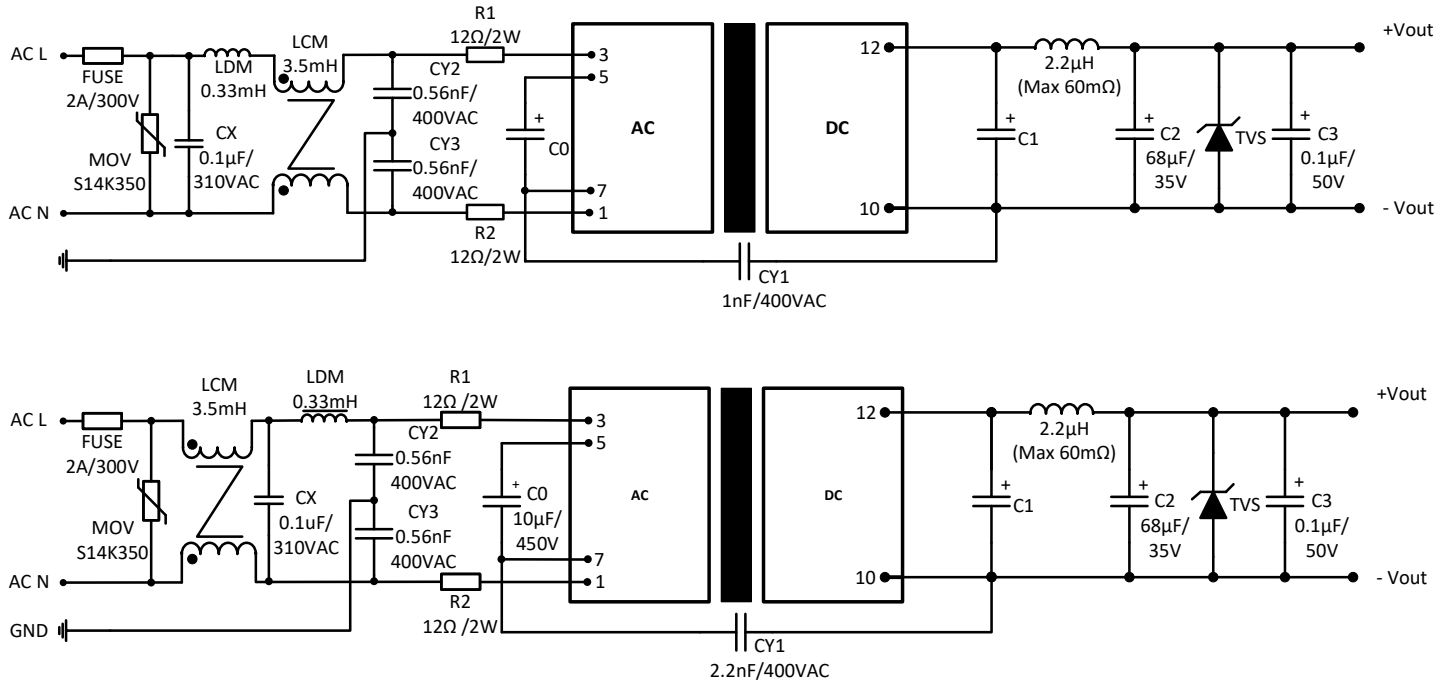
### Typical application circuit



### Recommended EMC circuit for EN60335



**Recommended EMC circuit for EMS Class IV, EMI Class B**



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