

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 (μF)	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 AMEOF1-5S277HANZ.

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		± 8	%
	Full load, others		± 5	%
Line regulation	Full load	± 1.5		%
Load regulation	5% - 100% load, 24V output	± 6		%
	5% - 100% load, others	± 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			

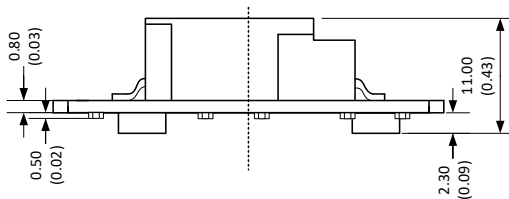
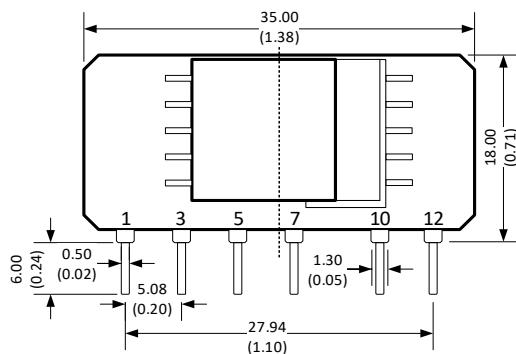
General Specifications (Continued)

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

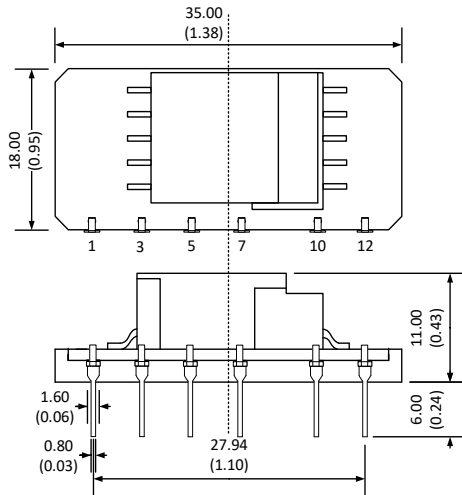


Note:
Unit: mm (inch)
Pin diameter tolerance: ±0.10 (±0.004)
Case tolerance: ±0.50 (±0.02)

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)

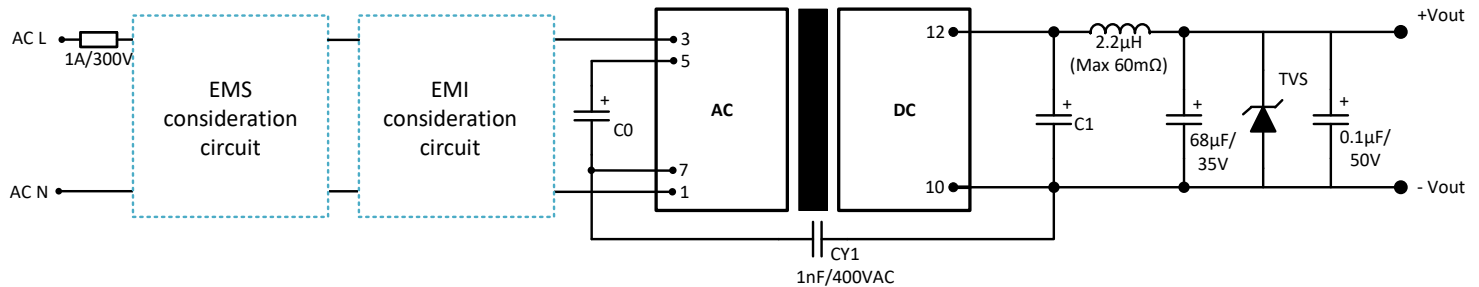
Pin diameter tolerance: $\pm 0.10 (\pm 0.004)$

Case tolerance: $\pm 0.50 (\pm 0.02)$

Note:

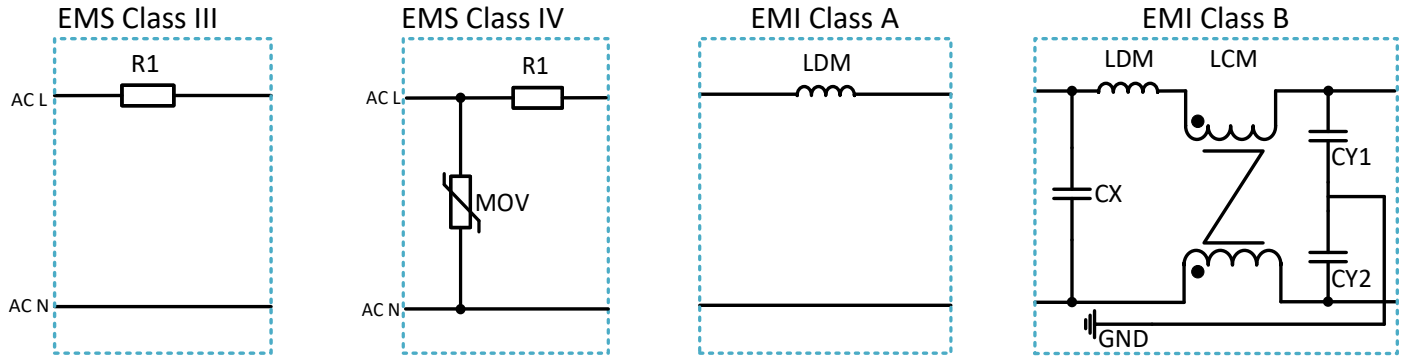
1. Capacitor between pin5 and pin7 is necessary.
2. External circuit on the output side is necessary. Please refer to the recommended circuit.
3. It is needed to have distance $\geq 6.4\text{mm}$ for safety between external components in primary circuit and secondary circuit.
4. The layout of the device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

Recommended EMC external circuit



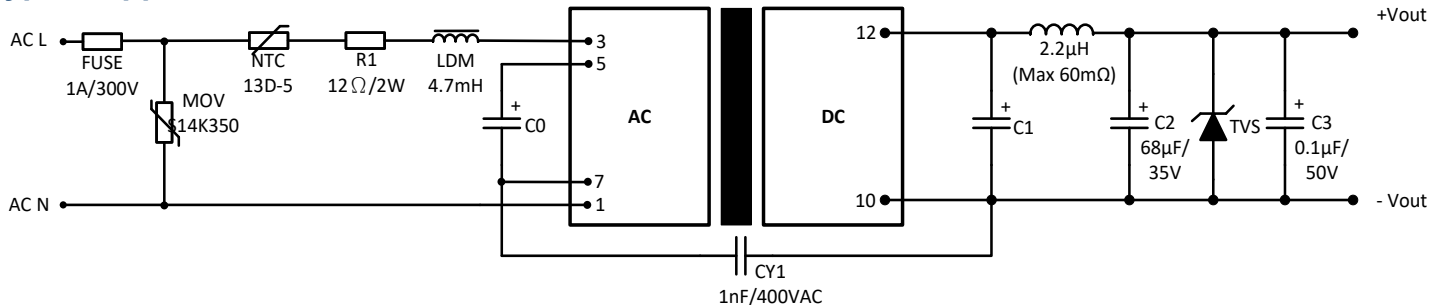
Model	C0	C1	TVS
5 VDC output	4.7 $\mu\text{F}/450\text{V}$ (-20°C to +85°C)	270 $\mu\text{F}/16\text{V}$ (Solid capacitor)	7V
9 VDC output		100 $\mu\text{F}/16\text{V}$ (Solid capacitor)	12V
12 VDC output	10 $\mu\text{F}/450\text{V}$ (-40°C to +85°C)	100 $\mu\text{F}/16\text{V}$ (Solid capacitor)	20V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

EMI & EMS Recommended Circuit

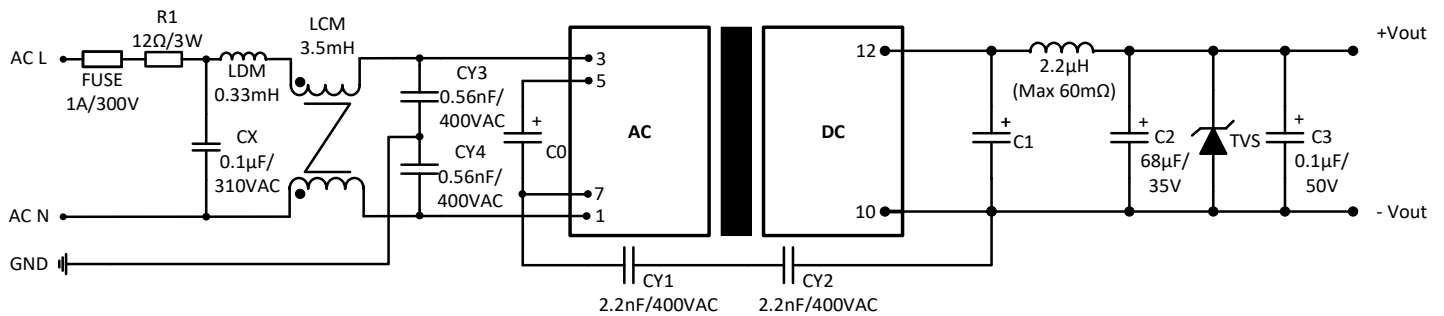


Component	EMS		EMI	
	Class III	Class IV	CLASS A	CLASS B
MOV	-	S14K350	-	-
R1	12Ω/3W	12Ω/3W	-	-
CX	-	-	-	0.1μF/310VAC
CY1	-	-	-	0.56nF/400VAC
CY2	-	-	-	0.56nF/400VAC
LCM	-	-	-	3.5mH
LDM	-	-	4.7mH	0.33mH
FUSE	1A/300V	2A/300V	1A/300V	1A/300V

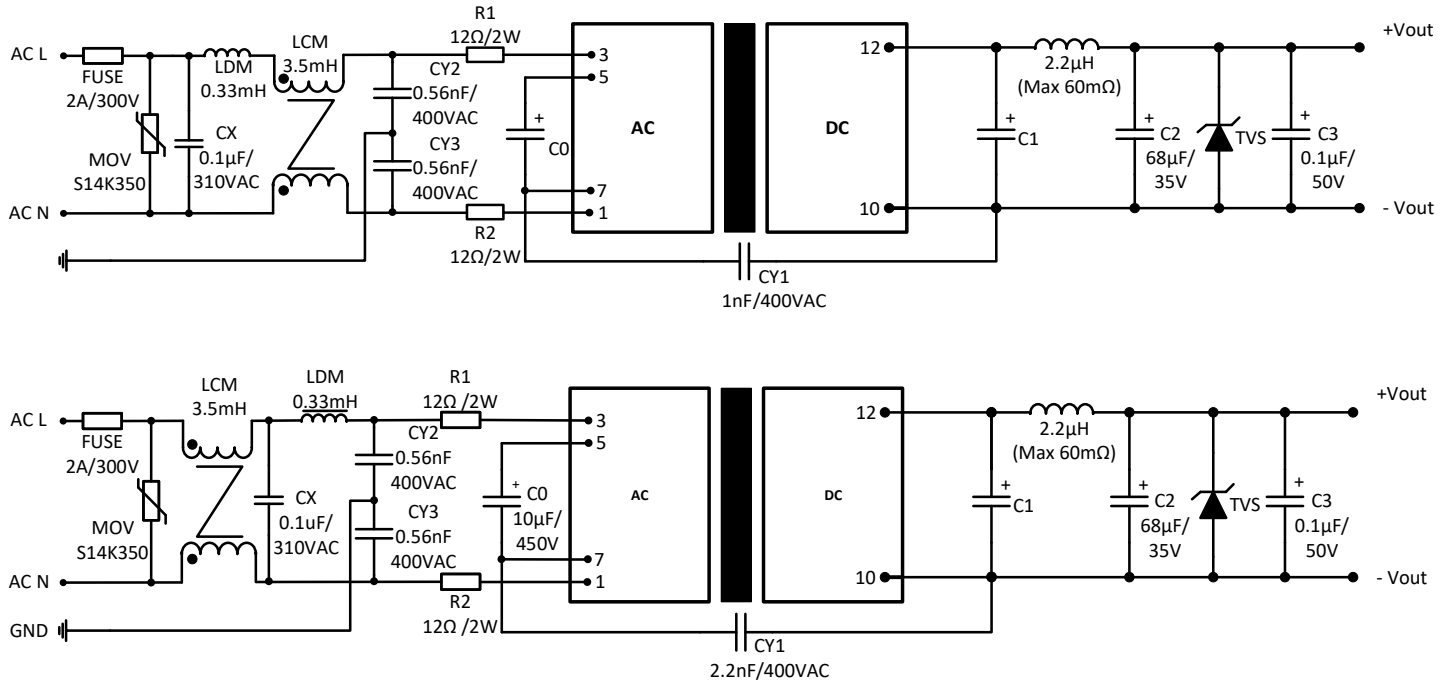
Typical application circuit



Recommended EMC circuit for EN60335



Recommended EMC circuit for EMS Class IV, EMI Class B



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