

FEATURES:

- Input: 90-528VAC, 47-63Hz or 100-745VDC
- Operating temperature -40°C to +85°C
- Low power consumption $\leq 0.5W$ at 528VAC
- Continuous short circuit protection
- I/O Isolation 4000VAC
- Compact open frame SIP
- Over current protection
- Class II power supply

Models
Single output



Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Full power temperature range (°C)	Output Voltage (V)	Output Current max (mA)	Maximum capacitive load (μ F)	Efficiency (%)
AMEOF3-3.3SBJZ	90-528/47-63	100-745	-20 to +55	3.3	500	2200	63
AMEOF3-5SBJZ	90-528/47-63	100-745	-20 to +55	5	500	1100	67
AMEOF3-9SBJZ	90-528/47-63	100-745	-20 to +55	9	333	680	70
AMEOF3-12SBJZ	90-528/47-63	100-745	-20 to +55	12	250	680	76
AMEOF3-15SBJZ	90-528/47-63	100-745	-20 to +55	15	200	560	76
AMEOF3-24SBJZ	90-528/47-63	100-745	-20 to +55	24	125	470	76
AMEOF3-3.3SLBJZ	90-528/47-63	100-745	-20 to +55	3.3	500	2200	63
AMEOF3-5SLBJZ	90-528/47-63	100-745	-20 to +55	5	500	1100	67
AMEOF3-9SLBJZ	90-528/47-63	100-745	-20 to +55	9	333	680	70
AMEOF3-12SLBJZ	90-528/47-63	100-745	-20 to +55	12	250	680	76
AMEOF3-15SLBJZ	90-528/47-63	100-745	-20 to +55	15	200	560	76
AMEOF3-24SLBJZ	90-528/47-63	100-745	-20 to +55	24	125	470	76

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.

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Current	115VAC		120	mA
	230VAC		60	mA
	480VAC		40	mA
Inrush current <2ms	115VAC	9		A
	230VAC	15		A
	480VAC	27		A
External fuse	Recommended slow blow type	2		A
Input dissipation	No Load, 230VAC		0.3	W
	No Load, 528VAC		0.5	
Leakage current	230VAC/50Hz	250		mA

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Full load, 3.3V output	± 6		%
	Full load, others	± 5		
Line regulation	Full load, 3.3V output	± 2.5		%
	Full load, others	± 1.5		
Load regulation	10% - 100% load	± 2.5		%
Ripple & Noise	20MHz Bandwidth		180	mV p-p
Hold up time	230VAC	40		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		4000	VAC
Isolation Resistance		>1000		M Ω

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		70		KHz
Over current protection	Auto-recovery	150-300		% of I out
Short circuit protection		Hiccup, Continuous		
Short circuit restart		Auto-recovery		
Operating temperature	See derating curve	-40 to +85		°C
Storage temperature		-40 to +105		°C
Temperature coefficient		±0.15		% / °C
Cooling		Free air convection		
Humidity			85	% RH
Weight		8		g
Dimensions (L x H x W)		1.75 x 0.94 x 0.51 inches	44.5 x 24 x 13 mm	
MTBF		>300,000 hours (MIL-HDBK -217F, Ground Benign, t=+25°C)		

Safety Specifications

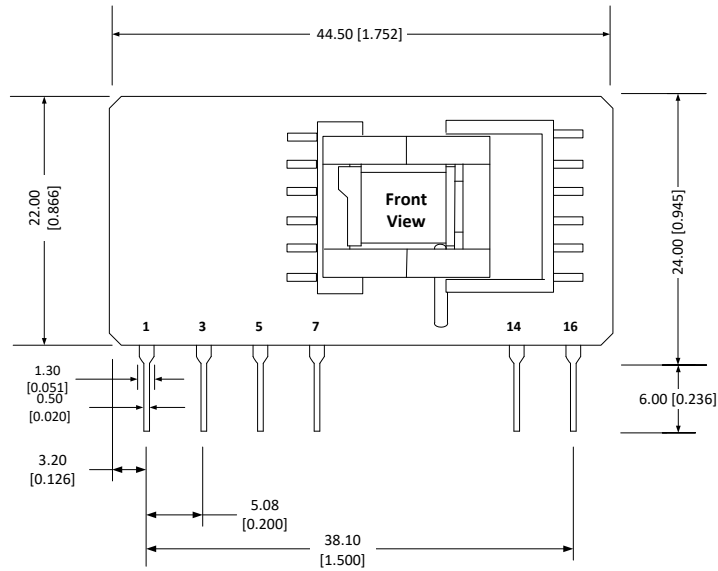
Parameters		
Agency approvals	cULus	
Standards	Information technology Equipment	UL 60950-1
	EMI – Conducted and Radiated Emission	CISPR22/EN55022/FCC part 15, Class A & B, with external filter circuits, as referenced
	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact ±4KV, Criteria B
	RF, Electromagnetic Field Immunity	IEC 61000-4-3, 10V/m, Criteria A, with Class B external filter, as referenced
	Electrical Fast Transient / Burst Immunity	IEC 61000-4-4, ±2KV/±4KV, Criteria B, with Class A/B external filter referenced
	Surge Immunity	IEC 61000-4-5, ±1KV/±2KV, Criteria B, with Class A/B external filter referenced
	RF, Conducted Disturbance Immunity	IEC 61000-4-6, 3Vrms, Criteria A, with Class B external filter, as referenced
	Voltage dips, Short Interruptions Immunity	IEC 61000-4-11, 0-70%, Criteria B, with Class B external filter, as referenced

Pin Out Specifications*

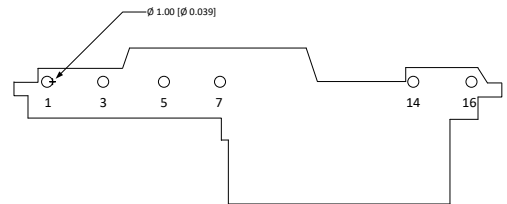
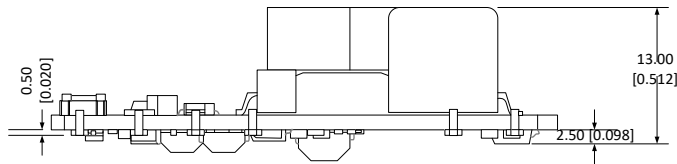
Pin	Single
1	AC N
3	AC L
5	+V sc
7	-V sc
14	-V Output
16	+V Output

* Add C1, C2, R1 and R2 between pin 5 & 7.
**Add pi-filter to the output as suggested in the Application circuit below.

Dimensions

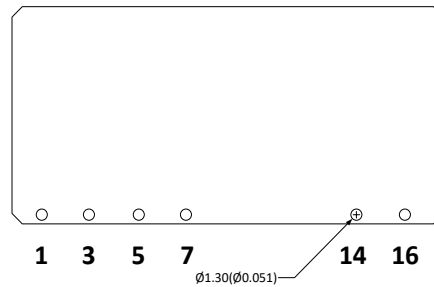
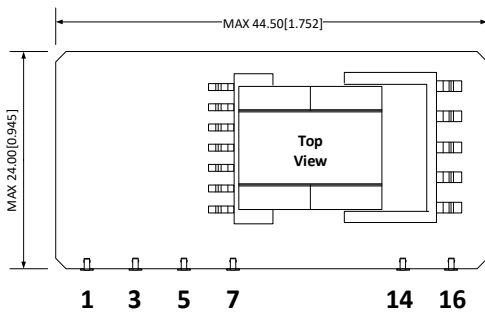


Bottom View

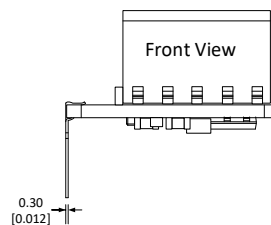
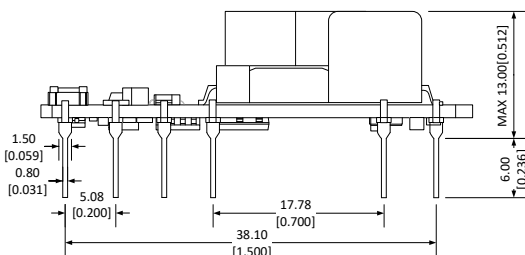


Note:
Unit: mm [inch]
Pin section tolerances: $\pm 0.10 [\pm 0.004]$
General tolerances: $\pm 0.50 [\pm 0.020]$

L Models Dimension

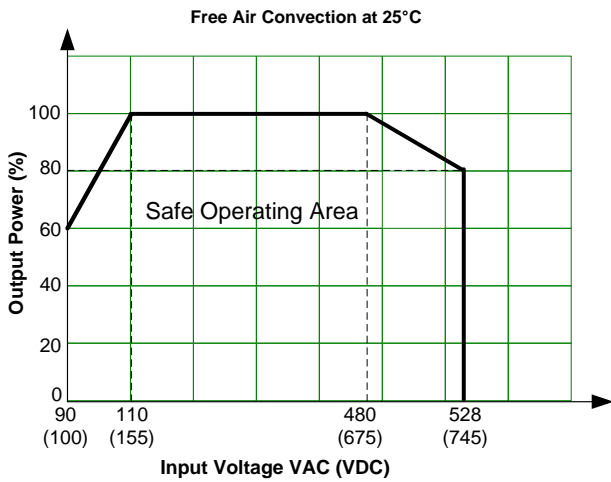
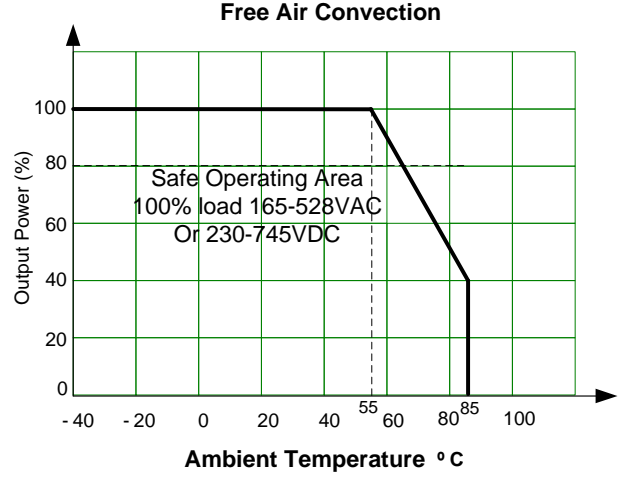
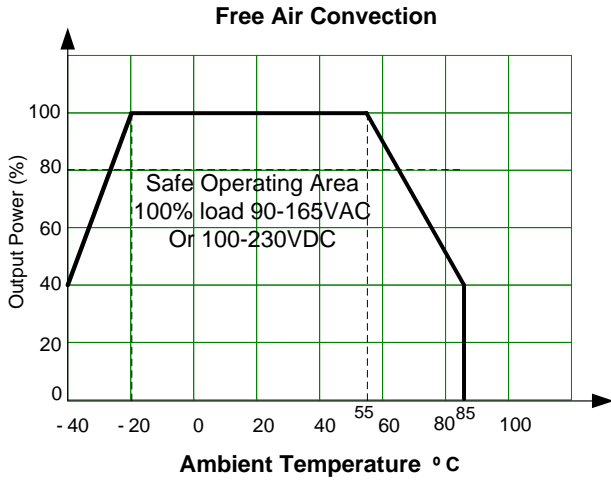


Side View

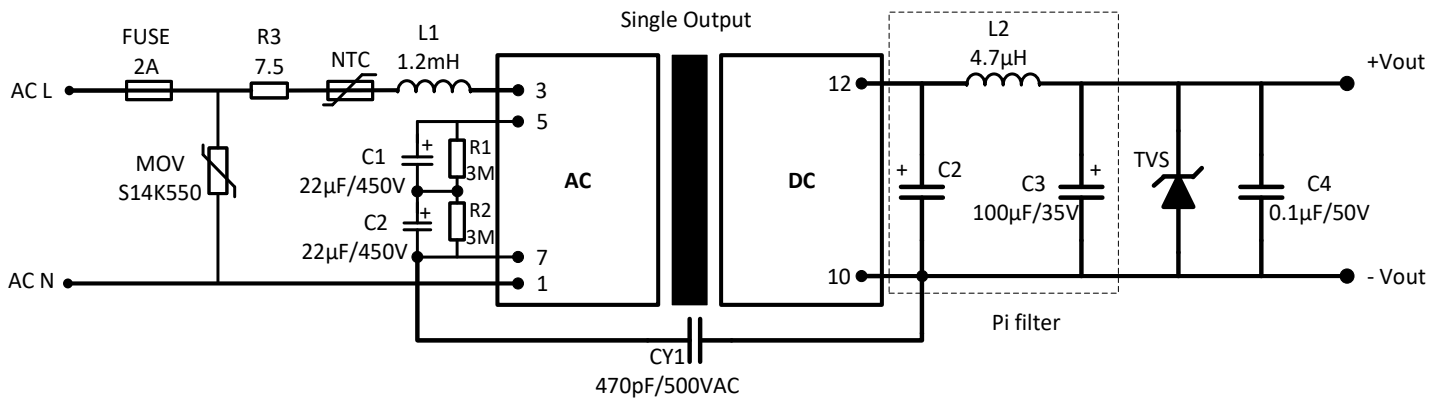


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Unit: mm [inch]
Pin section tolerances: $\pm 0.10 [\pm 0.004]$
General tolerances: $\pm 0.50 [\pm 0.020]$

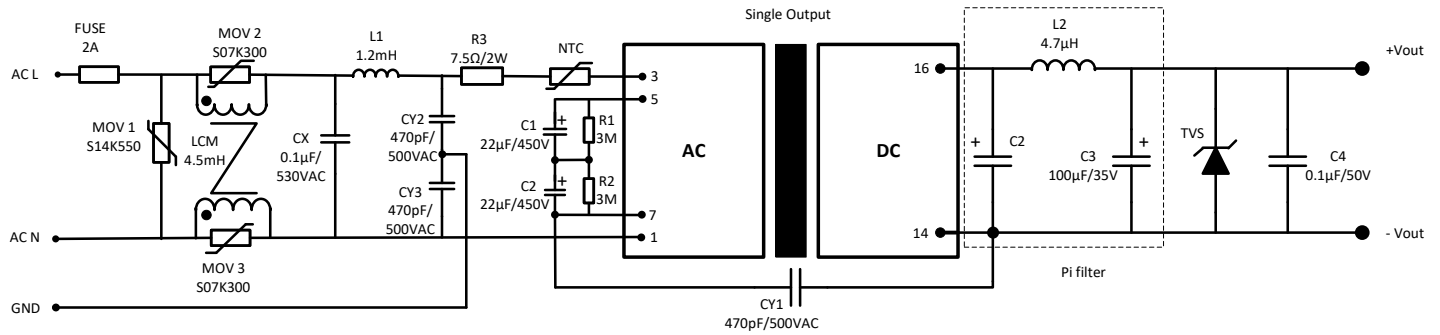
Derating*



Recommended EMC class A external circuit:



Recommended EMC class B external circuit:



Model	C5	TVS
3.3 Vout	270µF/16V	7V
5 Vout		12V
9 Vout	470µF/35V	20V
12 Vout		30V
15 Vout		
24 Vout	220µF/35V	

- Notes:**
- ① For Safety compliance, we recommend minimum PCB trace distance of 3mm, minimum distance between PCB traces of 6mm, primary to secondary circuit traces distance between minimum of 6.4mm.
 - ② Operation voltage of the balancing resistors R1 and R2 should be over 450V.
 - ③ At cold temperature full load operations from -40 to -20°C some of the external components need different values to meet the EMC levels:
C1 & C2: 33µF/450V instead of 22µF/450V;
R1 & R2: 1MΩ instead of 3MΩ;
R3: 12Ω instead of 7.5Ω.

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