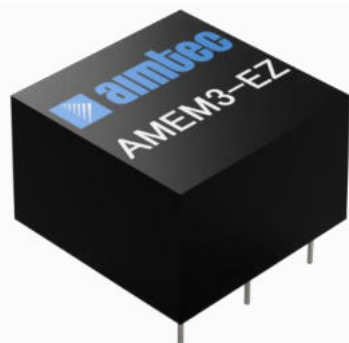


AMEM3-EZ

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samples



Encapsulated

AMEM3-EZ series is an efficient 3W AC-DC power supply module. Offering a commercial input voltage range of 90-264VAC, output voltage ranges from 3.3-48V, and safer isolation.

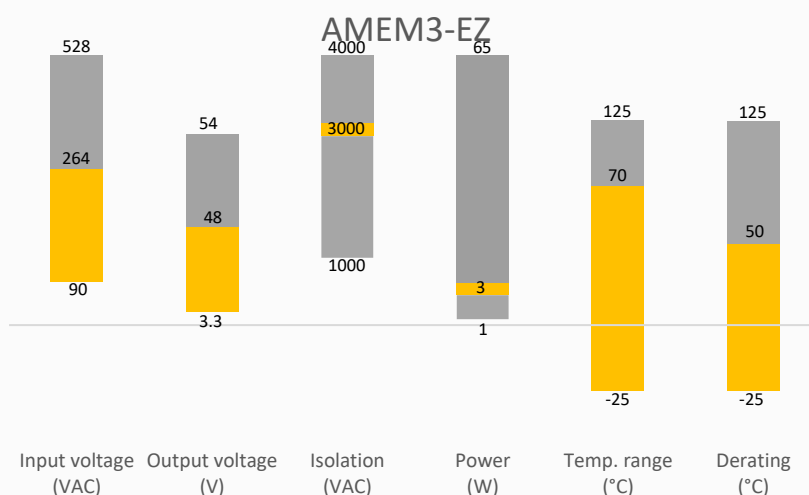
This new series offers great operating temperatures, from -25°C to 70°C with full power up to 50°C and features an isolation of 3000VAC for improved reliability and system safety. Furthermore, an output short circuit protection (OSCP), output over-current protection (OCP) and an output over-voltage protection (OVP) come standard with the series.

The AMEM3-EZ is suitable for grid power, LED, instrumentation, industrial controls, communication, and civil applications.

Features

- Ultra Compact Size 1.0" x 1.0" x 0.63" Package
- Universal Input: 90 - 264VAC/120 - 370VDC
- Operating Temp: -25 °C to +70 °C
- High isolation voltage: 3000VAC
- Output short circuit, over-current, over-voltage protection
- Efficiency up to 80%
- Certified: UL 62368-1
- Designed to meet: IEC 62368-1
- Made in Taiwan

Summary



Training



Product Training Video
(click to open)



Press Release

Coming Soon!

Application Notes

Applications



Power Grid



Industrial



Telecom



Instrumentation

Models & Specifications

Single Output							
Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Output Current (mA)	*Ripple & Noise (mV)	Maximum capacitive load (μF)	Efficiency Typ. (%)
AMEM3-3SEZ	90-264/47-63	120-370	3.3	1000	60	2200	71
AMEM3-5SEZ	90-264/47-63	120-370	5	600	60	1000	75
AMEM3-9SEZ	90-264/47-63	120-370	9	333	90	300	77
AMEM3-12SEZ	90-264/47-63	120-370	12	250	120	160	77
AMEM3-15SEZ	90-264/47-63	120-370	15	200	150	100	77
AMEM3-24SEZ	90-264/47-63	120-370	24	125	240	43	78
AMEM3-48SEZ	90-264/47-63	120-370	48	62.5	480	10	80
* Ripple & noise is measured by using 20 MHz bandwidth, measured with a 10uf electrolytic capacitor paralleled with a 1uf ceramic capacitor across each output by full load. Please refer to the Parallel Lines Measure.							

Input Specifications				
Parameters	Conditions	Typical	Maximum	Units
Rated Input Voltage	Vo, Io nom	100~240		VAC
Inrush current	115VAC, Io nom		10	A
	230VAC, Io nom		20	A
Input Fuse	FUSE 2.5A/250V (Slow blow)			

Output Specifications				
Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Vi, Io Nom, 3.3V / 5V output models		±3	%
	Vi, Io Nom, other output models		±2	%
Line regulation	Vi nom, Io nom		±1	%
Load regulation			±1	%
Minimum Load	Vi nom	0		A
Transient Recovery time	Vi nom, Io nom = $\leftarrow \rightarrow$ 0.5 Io nom	1000		μs

Isolation Specification				
Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	5 sec, leakage ≤ 5mA	3000		VAC
Resistance	500VDC	>100		MΩ

General Specifications				
Parameters	Conditions	Typical	Maximum	Units
Over current protection	Auto recovery	≥ 110		% of Iout
Over voltage protection	120-150% rated Vout, Protection type: Zener diode clamp			
Short circuit protection	Auto recovery			
Switching Frequency		65		KHz
Operating temperature	See derating graph	-25 to +70		°C
Storage temperature		-40 to +85		°C

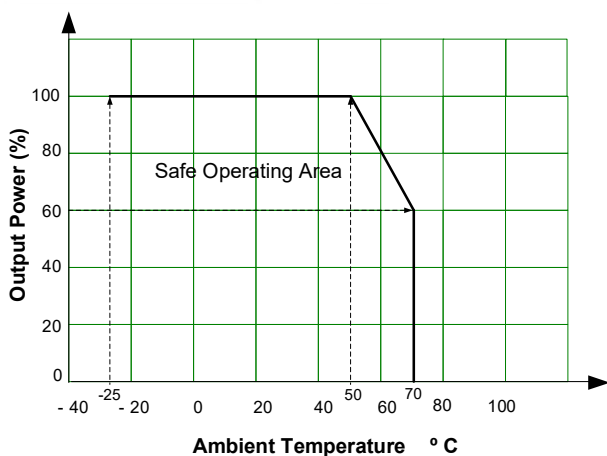
Power Derating	+50 °C to +70 °C	2		%/°C
Cooling	Free air convection			
Humidity	Vi nom, Io nom		95	% RH
Weight		20		g
Dimensions (L x W x H)	1.00 x 1.00 x 0.63 inches (25.40 x 25.40 x 16.10 mm)			
NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.				

Safety Specifications

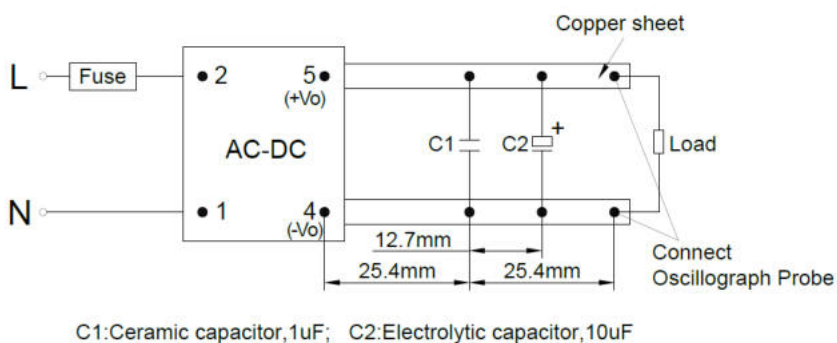
Parameters

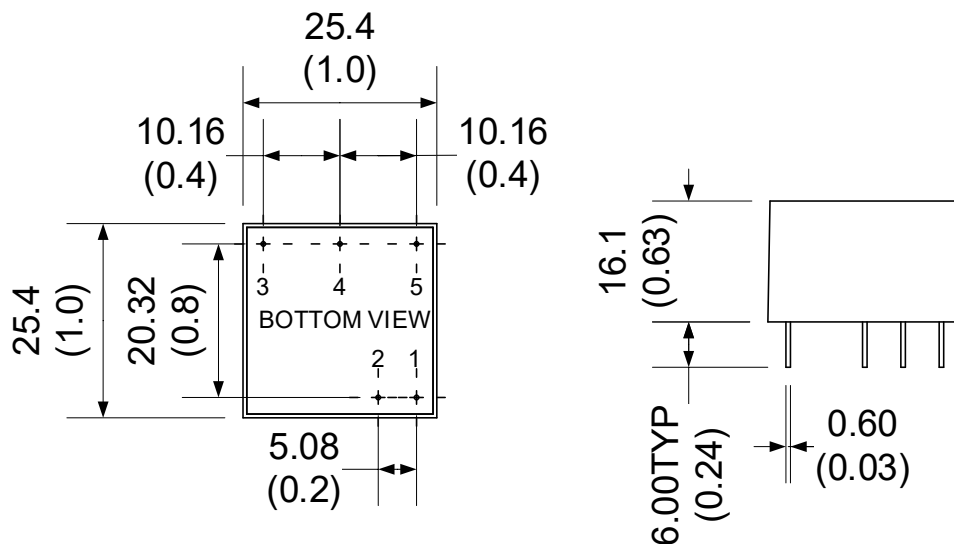
Agency Approvals	UL 62368-1		
	Designed to meet IEC 62368-1		
Standards	EMI Conducted & Radiated	EN55032, CLASS B	
	EMS Immunity	EN61000	

Derating



Parallel Lines Measure





Unless otherwise specified, all tolerances are $\pm 0.50(0.02)$

Pin Output Specifications	
Pin	Function
1	AC Input (N)
2	AC Input (L)
3	NC
4	-V Output
5	+V Output

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