Series AME15-MJZ

15 Watt | AC-DC / DC-DC Converter

Picture coming soon

FEATURES:

- Isolation 4000VAC
- Operating Temp: -40˚C to +70˚C
- Input: 85-264VAC, 47-440Hz, or 100-370VDC
- Leakage current <100µF
- 2xMOPP compliance
- No load consumption <0.1W
- 5000m altitude compliance
- Efficiency up to 86%

Models
Single output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Output Current max (A)	Maximum capacitive Load (µF)	Efficiency 230VAC (%)
AME15-5SMJZ	85-264/47-440	120-370	5	2.8	8000	78
AME15-12SMJZ	85-264/47-440	120-370	12	1.25	4000	83
AME15-15SMJZ	85-264/47-440	120-370	15	1	3000	83
AME15-18SMJZ	85-264/47-440	120-370	18	0.833	2000	84
AME15-24SMJZ	85-264/47-440	120-370	24	0.625	800	86

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 (full load)	115 VAC		370	mA
	230 VAC		220	mA
Inrush current <2ms (cold start)	115 VAC	10		A
	230 VAC	20		A
Leakage current	264VAC/60Hz		0.1	mA
External fuse	Recommended slow fusing	2		A

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Line regulation	Full load	±0.5		%
Load regulation	0-100% load	±1		%
Ripple and Noise	20 MHz bandwidth	50	100	mV p-p
Hold-up time	115VAC, 20MHz bandwidth	15		ms
	230VAC, 20MHz bandwidth	80		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec, ≤5mA		4000	VAC
Isolation Resistance		>1000		MΩ

General Specifications

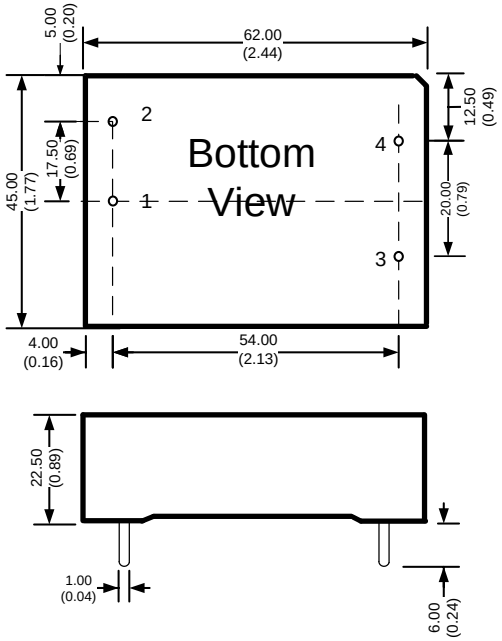
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	65		KHz
Protection class	Class II			
Over current protection		≥110		% of Iout
Over voltage protection	Zener diode clamp			
Short circuit protection	Continuous, Auto recovery			
Operating temperature	See derating curve	-40 to +70		ºC
Storage temperature		-40 to +85		ºC
Maximum Case temperature			100	ºC
Temperature coefficient		±0.02		% / ºC
Cooling	Free air convection			
Humidity	Non-condensing		95	% RH

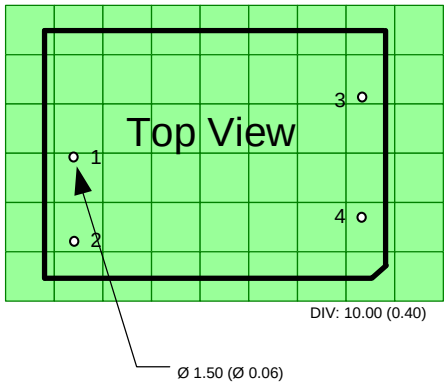
Case material	Plastic (flammability to UL 94V-0)			
Weight		85		g
Dimensions (L x W x H)	2.44 x 1.77 x 0.89 inches		62.0 x 45.0 x 22.50 mm	
MTBF	> 300,000 hrs (MIL-HDBK -217F, t=+25ºC)/Full Load			

Safety Specifications

Parameters		
Approvals	CE, cULus (pending)	
Standards	Medical Devices and Equipment	IEC/EN/UL 60601-1, 2xMOPP
	EMI - Conducted and radiated emission	EN55022, class B
	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact: ±6KV/Air: ±8KV, 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
	Surge Immunity	IEC 61000-4-5, ±1KV, Criteria B
	RF, Conducted Disturbance Immunity	IEC 61000-4-6, 10Vrms, Criteria A
	Voltage dips, Short Interruptions Immunity	IEC 61000-4-11, 0-70%, Criteria B

Dimensions



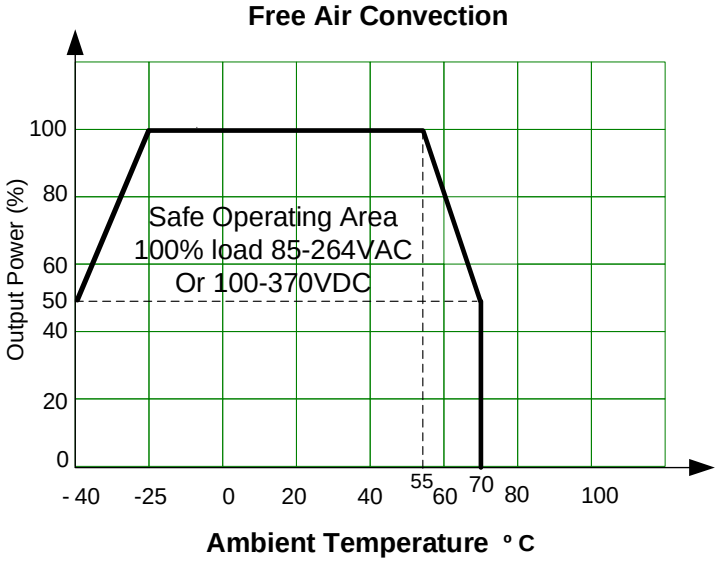


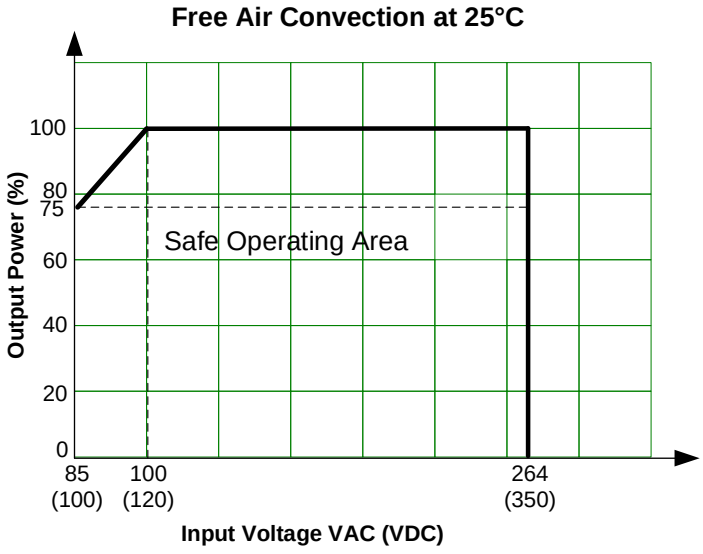
Dimensions mm (inch)
Case Tolerance ±0.50 (±0.02)
Pin Diameter 1.0 ± 0.10 (0.04 ± 0.004)

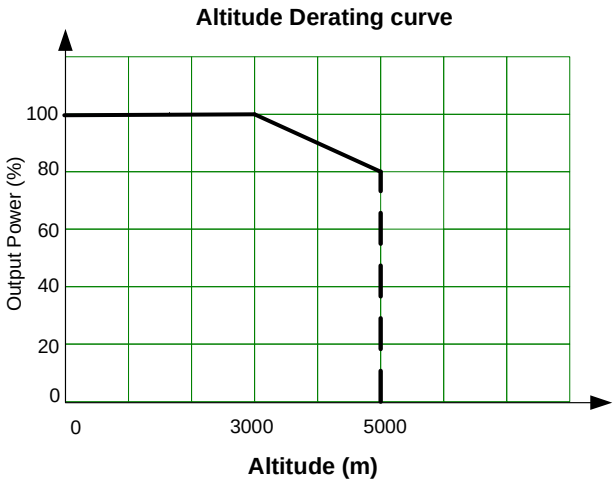
Pin Out Specifications

Pin	Single
1	AC Input (N)
2	AC Input (L)
3	-V Output
4	+V Output

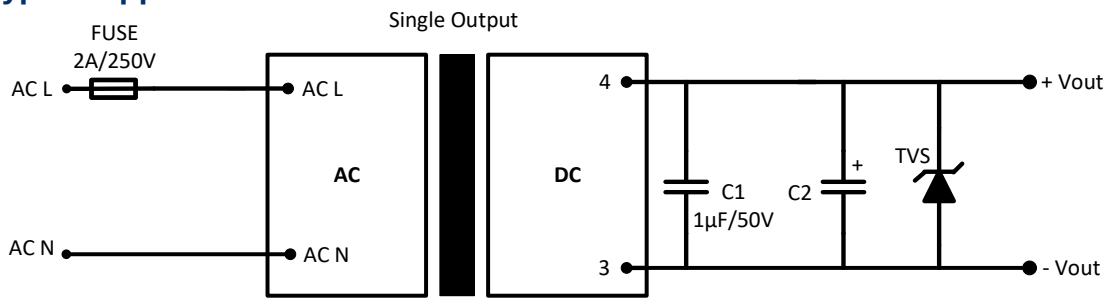
Derating







Typical application circuits



Model	C2	TVS
5 Vout	680 µF / 16V	7V
12 Vout	470 µF / 16V	20V
15 Vout	220 µF / 35V	
18 Vout		30V
24 Vout	68 µF / 35V	

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