

FEATURES:

- Open Frame design
- 4000 VAC Isolation
- Short Circuit Protection
- Over-voltage Protection
- Very wide input range
- Low Ripple & Noise
- High Efficiency
- Low Standby Power < 0.55W



Models
Single output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Temperature range (°C)	Output Voltage (V)	Output Current max (A)	Maximum capacitive load (µF)	Efficiency (%)
AMEO6-5S-NZ	30-280 / 47-440	30-400	-25 to +70	5	1.2	6000	71
AMEO6-12S-NZ	30-280 / 47-440	30-400	-25 to +70	12	0.55	2000	77

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	Vin=220VAC	100		mA
Inrush current <2ms	Vin=220VAC	20		A
	Vin=110VAC	10		
Leakage current	Vin=230VAC, 50Hz	0.3		mA
External fuse	Slow Blow Type	3.15A 250V		A
Input dissipation	Vin=220VAC, Io=0A	0.55		W

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		± 1		%
Line regulation		± 0.5		%
Load regulation	10 – 100% of Load	± 1		%
Transient recovery time	500µs for 25% load step	1000		µs
Transient response deviation		± 4		mV%
Ripple & Noise	20MHz Bandwidth		(5V Model) 75 (12V Model) 130	mV p-p
Hold-up time (min)		200		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60s > 50MΩ		4000	VAC

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		60		KHz
Start up time		50		mS
Over voltage protection		Clamp Diode		%
Short circuit protection		Continuous		
Short circuit restart		Auto Recovery		
Operating temperature	Refer to Derating Curve	-25 to +70		°C
Storage temperature		-25 to +85		°C
Cooling		Free Air Convection		
Temperature coefficient		±0.02		% / °C
Humidity		20 - 90		% RH
Weight		55		g
Dimensions (L x W x H)		3.14 (L) x 1.57 (W) x 1.81 (H) inches	80 (L) x 40 (W) x 30 (H) mm	
MTBF		> 300,000h @25°C		

Environment Approval

Test	Parameters	Conditions
Shock	Acceleration amplitude	196.1 m/s ²
	Bump duration	11 ms
	Number of bumps	Along x, y, z, once each
Vibration	Test mode	10 ~ 55 Hz
	Displacement	3 minutes / cycle
	Acceleration	19.6 m/s ²
	Converter operation	60 minutes

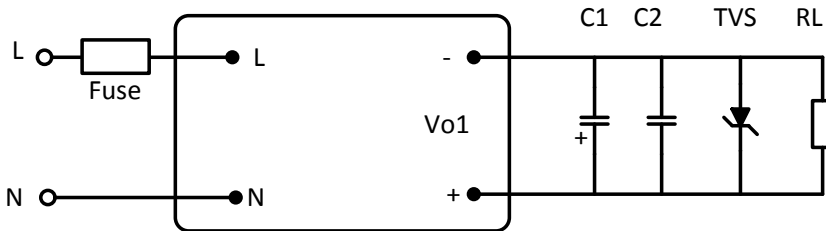
Safety Specifications

Parameters	
Standards	Designed to meet : IEC EN61000-4-2, EN61000-4-3, EN61000-4-4, IEC EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN 55022 class B

Pin Out Specifications

Pin	Designation
1	AC Input (L)
2	AC Input (N)
3	NC
4	No Pin
5	Common
6	+V Output

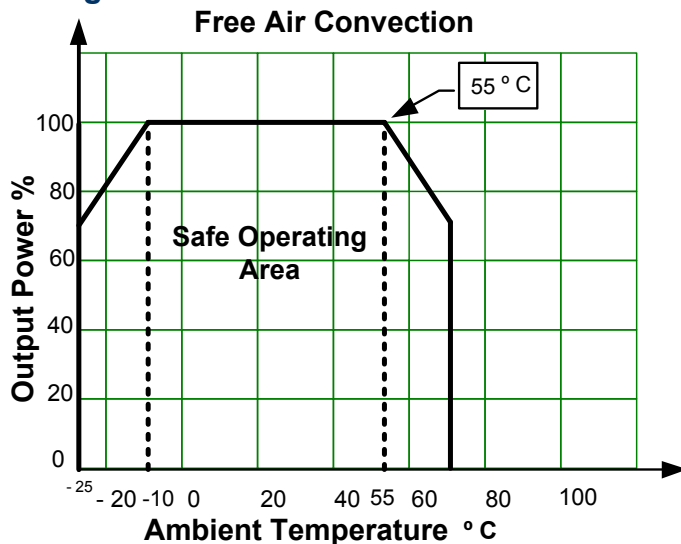
Typical Applications



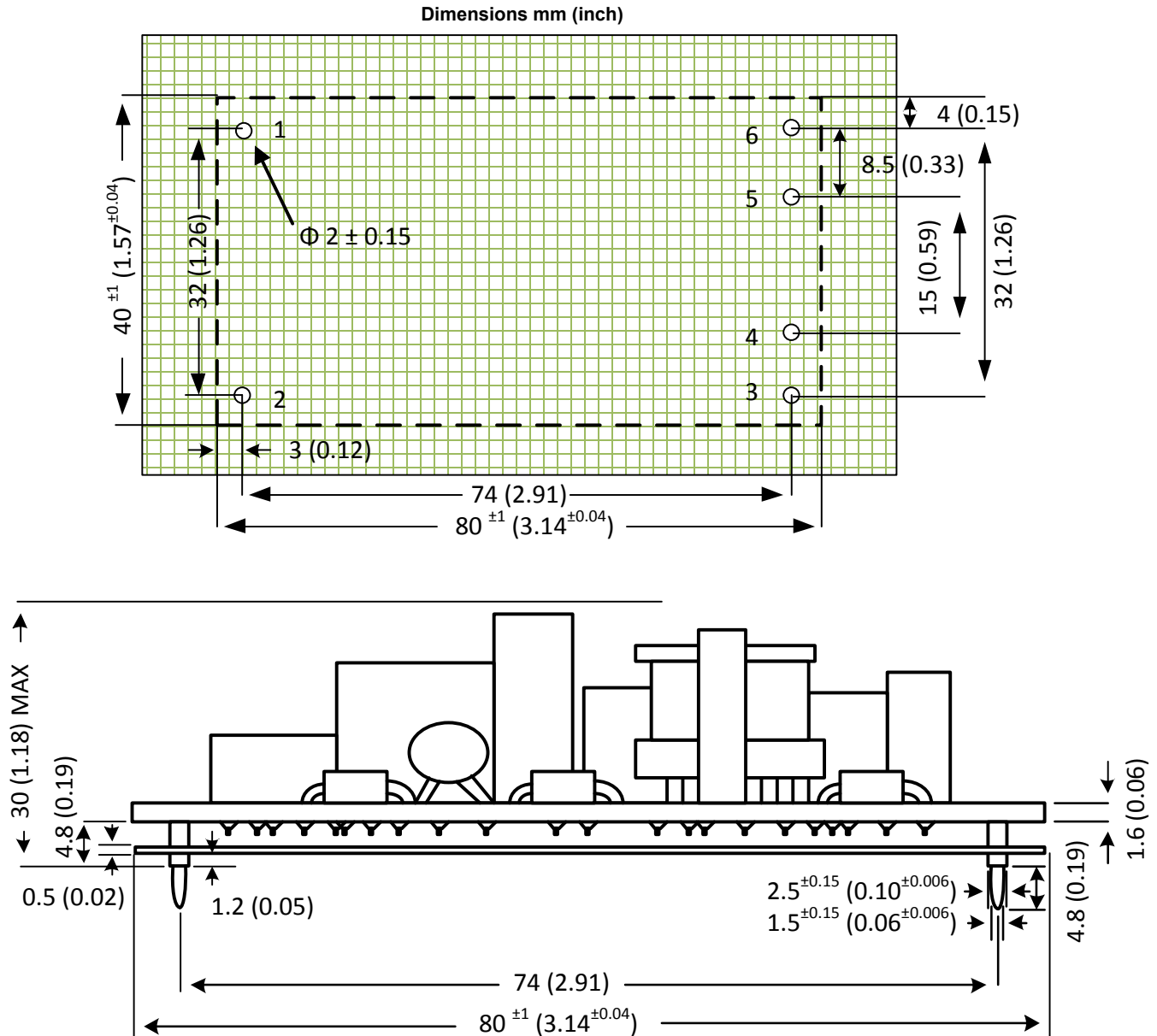
Device	Value
C1	Electrolytic 100 μ F / 25V
C2	Ceramic 0.1 μ F / 50V
TVS	P6SMB7.5A (AMEO6-5S-NZ) P6SMB16A (AMEO6-12S-NZ)

It is recommended that the output adds TVS (transient voltage suppressor) to protect adjacent circuits (if device fails).

Derating



Dimensions



NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other than the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com.