



#### FEATURES:

- RoHS compliant
- Remote On/Off control
- High Efficiency up to 90%
- Input Under voltage protection
- Trim adjustment
- Power modules for PCB mounting
- Operating temperature range: -40 to +85°C
- Standard package



#### Models Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Maximum capacitive load (μF)	Efficiency (%)
AM30K-2412S-NZ ✖	18 – 36	12	2.5	3240	89
AM30K-2415S-NZ	18 – 36	15	2	1100	89
AM30K-4824S-NZ ✖	36 – 75	24	1.25	900	90

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.

The model AM30K-2415S-NZ is not recommended for new designs; For new design, please refer to AM30K-2415SZ.

For models marked with ✖ will be discontinued (EOL) by December 30, 2020; For new design, please refer to AM30K-2412SZ and AM30K-4824SZ.

#### Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	24	18-36		VDC
	48	36-75		
Filter	$\pi$ (Pi) Network			
Start up time		25		ms
Absolute Maximum Rating	24 Vin		40	VDC
	48 Vin		80	
Peak Input Voltage time			100	ms
Remote On/Off Control	On	3.5 to 12VDC or open circuit		
	Off	0 to 1.2VDC or short circuit between pin 2 and 3		
Under Voltage protection	18-36 Vin OFF	16		VDC
	36-75 Vin OFF	33		

#### Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		1500	VDC
Resistance	At 500Vdc	>1000		MOhm
Capacitance	100KHz / 1V	1000		pF

#### Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1		%
Line voltage regulation	LL-HL	±0.2		% of Vin
Load voltage regulation	10% to 100% Load	±0.5		%
Short Circuit protection	Continuous			
Short Circuit restart	Auto Recovery			
Over current protection	Input Voltage Range	>120	160	%
Temperature coefficient		0.02		%/°C
Ripple & Noise	20MHZ Bandwidth	100		mV p-p
Transient Response Recovery Time	25% load step change	200		μs
Transient response overshoot		±2	±5	% of Vout
Voltage adjustment range		±10		%

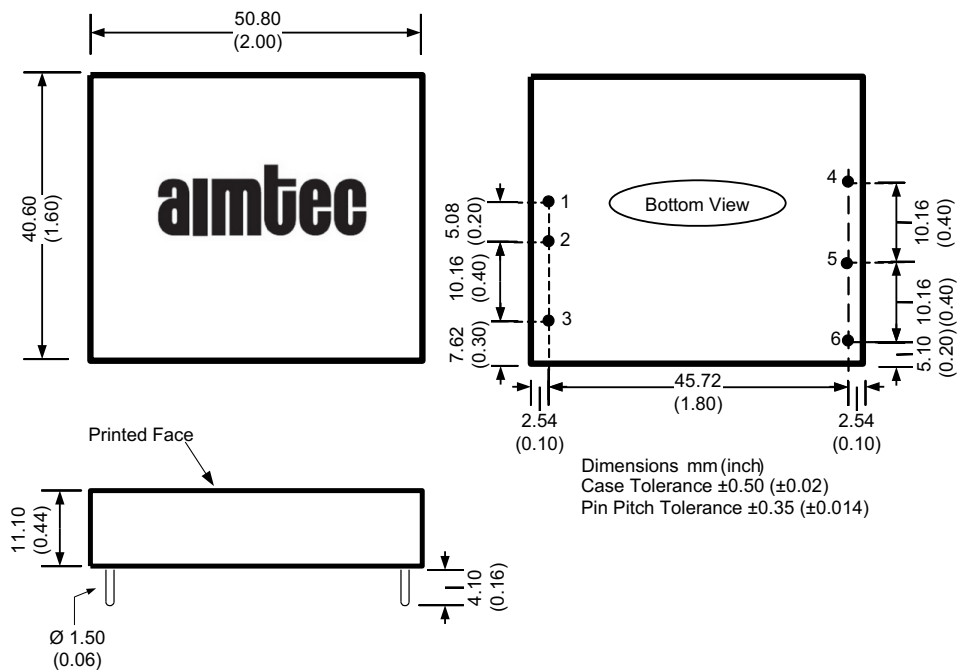
## General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	300		KHz
Operating temperature	With derating above +71°C	-40 to +85		°C
Storage temperature		-55 to +105		°C
Case temperature			95	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Black Anodized Aluminum			
Weight		45		g
Dimensions (L X W X H)	Tolerance ±0.5mm	2.00 x 1.60 x 0.44 inches	50.80 x 40.60 x 11.10mm	
MTBF	>1 000 000 hrs			

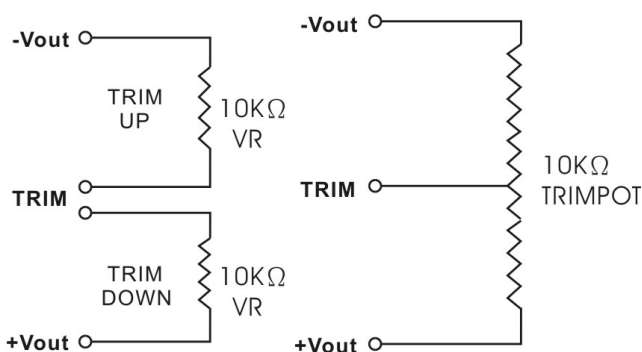
## Pin Out Specifications

Pin	Single
1	+V Input
2	-V Input
3	On/Off Control
4	+V Output
5	-V Output
6	Trim

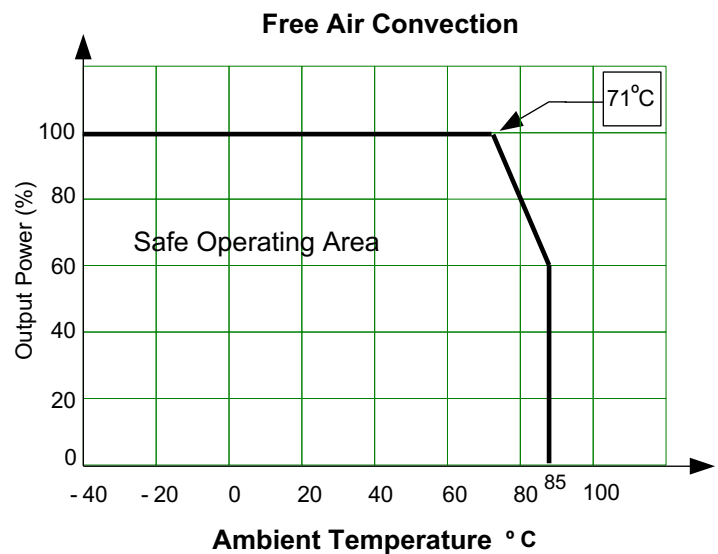
## Dimensions



## Trimming

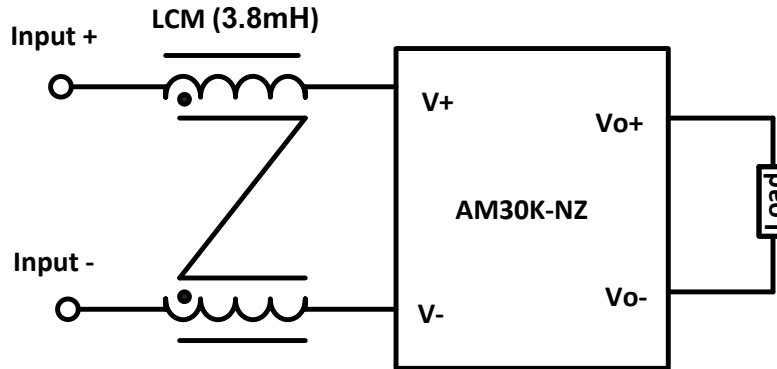


## Derating



### Recommended EMI Filtering (if required by end application)

Note: should your application not require filtering, no additional circuits are required.



**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](http://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 the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at [www.aimtec.com](http://www.aimtec.com).