



**FEATURES:**

- Ultra-Wide 4:1 Input
- Continuous Short Circuit Protection
- Remote On/Off control
- Standard package 2"x1.6"
- High efficiency up to 85%
- RoHS compliant

**Models**  
**Single output**



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Isolation (VDC)	Efficiency (%)
AM30KW-2403SIZ	9-36	3.3	5.4	1500	78
AM30KW-2405SIZ	9-36	5	6	1500	81
AM30KW-2412SIZ	9-36	12	2.5	1500	84
AM30KW-2415SIZ	9-36	15	2	1500	82
AM30KW-2424SIZ	9-36	24	1.25	1500	82
AM30KW-4803SIZ	18-75	3.3	5.4	1500	78
AM30KW-4805SIZ	18-75	5	6	1500	80
AM30KW-4812SIZ	18-75	12	2.5	1500	83
AM30KW-4815SIZ	18-75	15	2	1500	83
AM30KW-4824SIZ	18-75	24	1.25	1500	83
<b>SH30IZ Series</b>					
AM30KW-2403SH30IZ	9-36	3.3	5.4	3000	78
AM30KW-2405SH30IZ	9-36	5	6	3000	81
AM30KW-2412SH30IZ	9-36	12	2.5	3000	84
AM30KW-2415SH30IZ	9-36	15	2	3000	82
AM30KW-2424SH30IZ	9-36	24	1.25	3000	82
AM30KW-4803SH30IZ	18-75	3.3	5.4	3000	78
AM30KW-4805SH30IZ	18-75	5	6	3000	80
AM30KW-4812SH30IZ	18-75	12	2.5	3000	83
AM30KW-4815SH30IZ	18-75	15	2	3000	83
AM30KW-4824SH30IZ	18-75	24	1.25	3000	83

**Models**  
**Dual output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM30KW-2405DIZ	9-36	±5	±3	1500	81
AM30KW-2412DIZ	9-36	±12	±1.25	1500	82
AM30KW-2415DIZ	9-36	±15	±1	1500	83
AM30KW-4805DIZ	18-75	±5	±3	1500	83
AM30KW-4812DIZ	18-75	±12	±1.25	1500	85
AM30KW-4815DIZ	18-75	±15	±1	1500	85
<b>DH30IZ Series</b>					
AM30KW-2405DH30IZ	9-36	±5	±3	3000	81
AM30KW-2412DH30IZ	9-36	±12	±1.25	3000	82
AM30KW-2415DH30IZ	9-36	±15	±1	3000	83
AM30KW-4805DH30IZ	18-75	±5	±3	3000	83
AM30KW-4812DH30IZ	18-75	±12	±1.25	3000	85
AM30KW-4815DH30IZ	18-75	±15	±1	3000	85

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	Nominal	Typical	Maximum	Units
Voltage range	24	9-36		VDC
	48	18-75		
Filter	$\pi$ (Pi) Network			
Start up time				ms
Recommended input fuse (Slow Blow)	24	4A/250V		
	48	2A/250V		
Absolute Maximum Rating	24		50	VDC
	48		100	
Peak Input Voltage time				ms
On/Off control	ON –TTL High or Open ; OFF – TTL Low or Short			
No Load Input Current				mA

### Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	3 sec	1500 & 3000		VDC
Resistance	500VDC	>1000		MOhm

### Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		$\pm 2$		%
Over voltage Protection		Zener diode clamp		
Over current protection		>110		%
Short Circuit protection		Continuous		
Short circuit restart		Auto Recovery		
Line voltage regulation	HL-LL	$\pm 0.5$		% of Vin
Load voltage regulation (Single)	25-100%	$\pm 0.5$		%
Load voltage regulation (Dual)	25-100%	$\pm 1$		%
Temperature coefficient		$\pm 0.05$		%/°C
Ripple & Noise	20MHz Bandwidth	150		mV p-p
Voltage adjustment range		$\pm 10$		%
Minimum Load Current		25		% of Max

### General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	250		KHz
Operating temperature	With derating above 70°C	-40 to +85		°C
Storage temperature		-55 to +105		°C
Maximum case temperature			100	°C
Cooling		Free Air Convection		
Humidity			95	% RH
Case material		Nickel coated copper with non-conductive base		
Weight		50		g
Dimensions (L x W x H)		2.00 x 1.60 x 0.40 inches	50.80 x 40.60 x 10.20 mm	
MTBF		> 550 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		
Maximum soldering temperature				°C
Transient recovery time	25% step change	280		$\mu$ S
Transient recovery deviation				mS

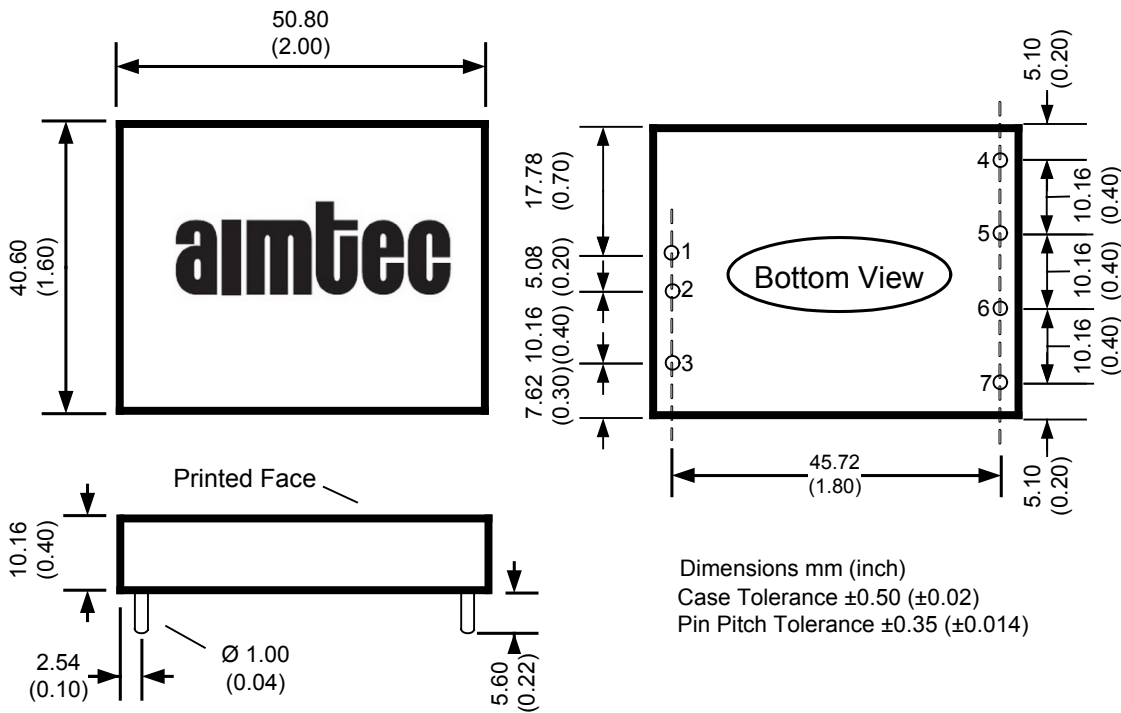
### Safety Specifications

Parameters	
Agency approvals	CE
Standards	EN 55022, EN 55024 class A

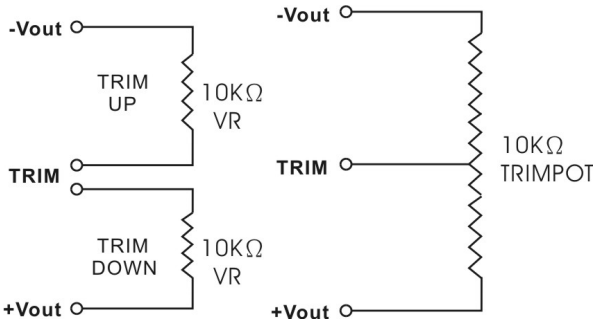
## Pin Out Specifications

Pin	Single	Dual
1	+V Input	+V Input
2	-V Input	-V Input
3	On/OFF Control	On/OFF Control
4	No pin	+V Output
5	+V Output	Common
6	-V Output	-V Output
7	Trim	Trim

## Dimensions

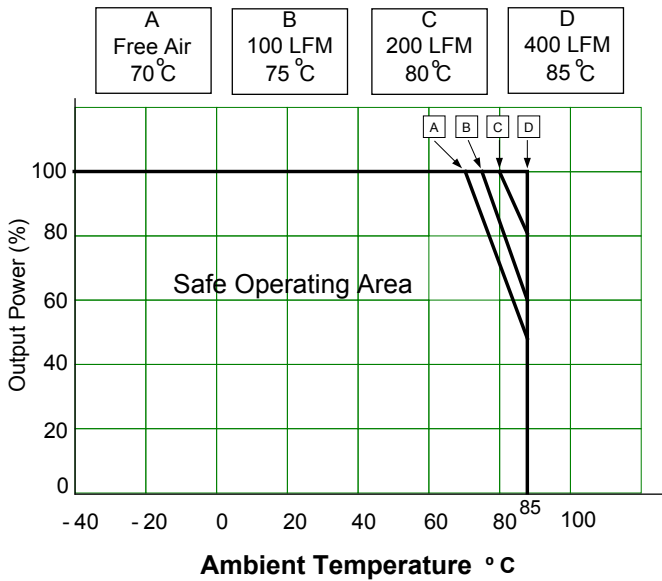


**Trimming**

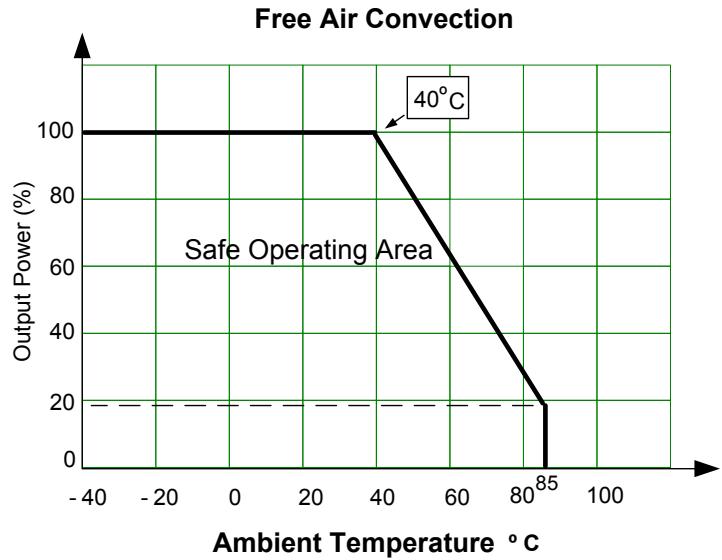


**Derating**

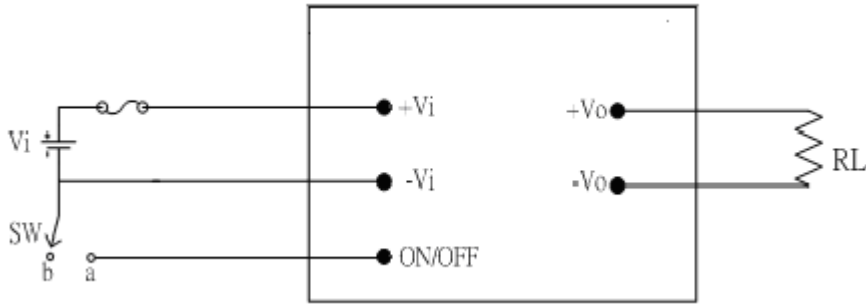
**1500VDC Isolation**



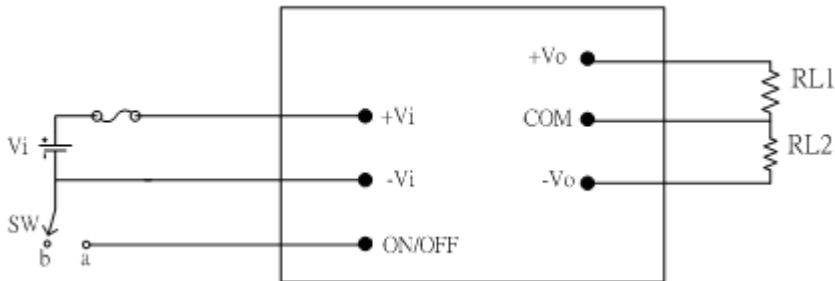
**3000VDC Isolation**



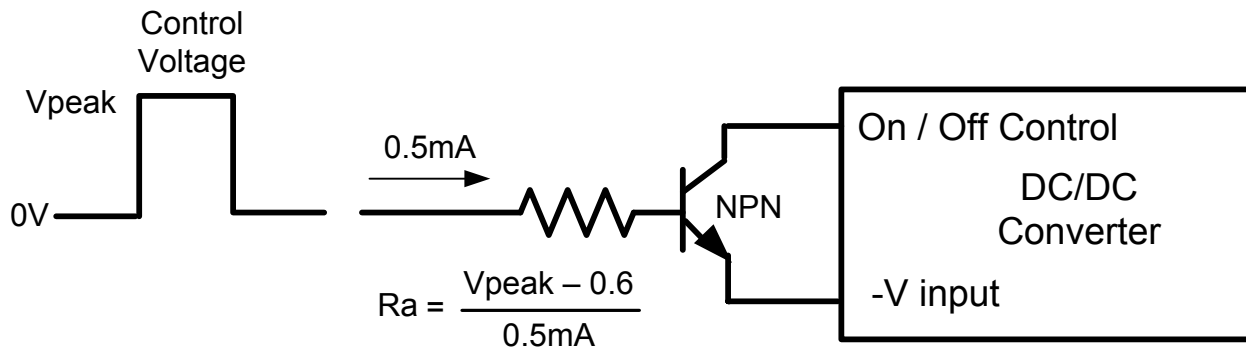
**Control ON/OFF pin connection example**  
**Single Output**



**Dual Output**



**Digital Control Circuit:**



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