



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
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
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	π (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			±2	%
Over voltage Protection	Zener diode clamp			VDC
	3.3 Vout models	3.71	4.1	
	5 Vout models	5.89	6.51	
	12 Vout models	14.25	15.75	
	15 Vout models	17.1	18.9	
	24 Vout models	25.65	28.35	
Over current protection		>110		%
Short Circuit protection	Continuous			
Short circuit restart	Auto Recovery			
Line voltage regulation	HL-LL		±0.5	% of Vin
Load voltage regulation (Single)	25-100%		±0.5	%
Load voltage regulation (Dual)	25-100%		±1	%
Temperature coefficient			±0.05	%/°C
Ripple & Noise	20MHz Bandwidth	150		mV p-p
Voltage adjustment range		±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		µS
Transient recovery deviation				mS

Safety Specifications

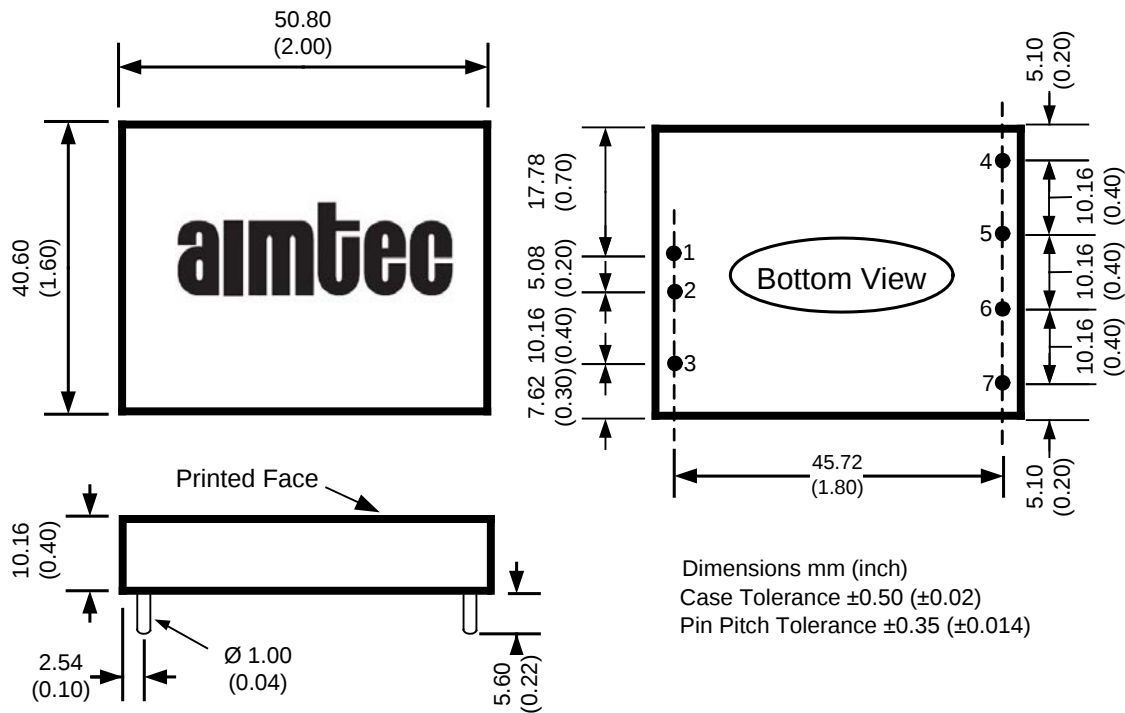
Parameters

Agency approvals	CE
Standards	EN 55022, EN 55024 class A

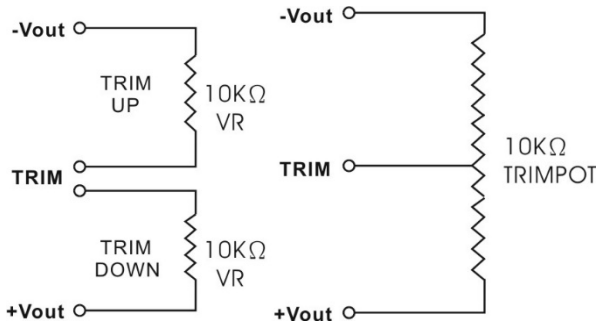
Pin Out Specifications

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

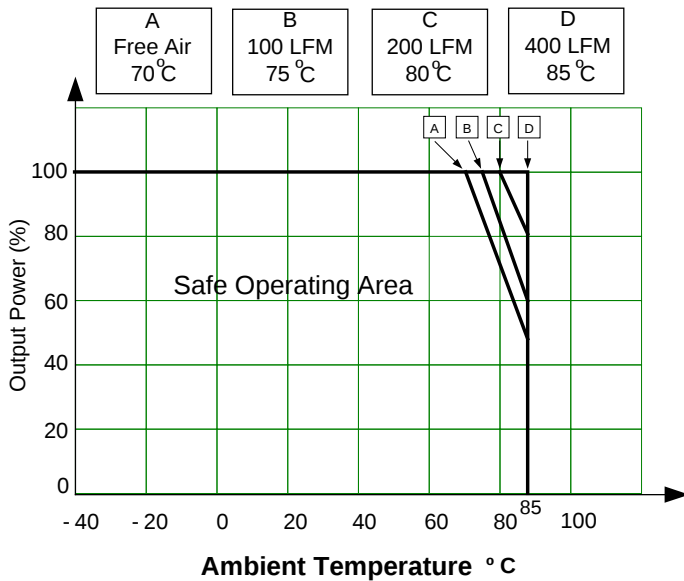


Trimming

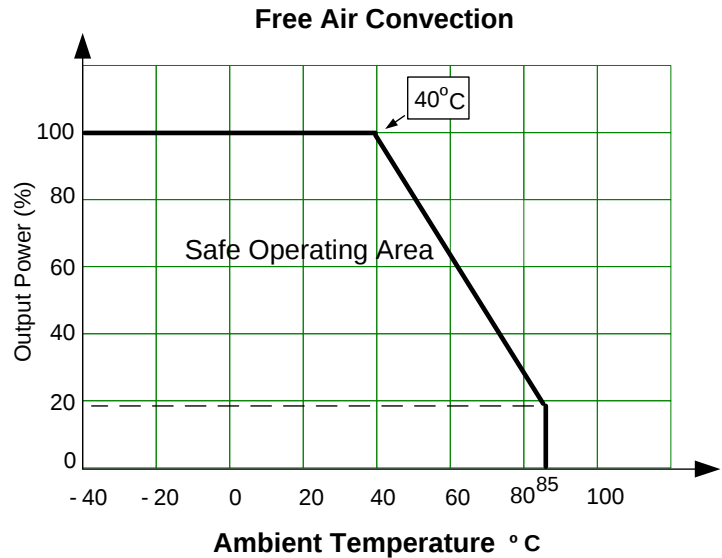


Derating

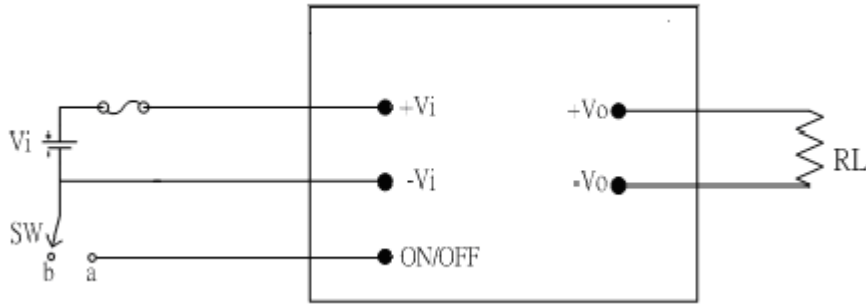
1500VDC Isolation



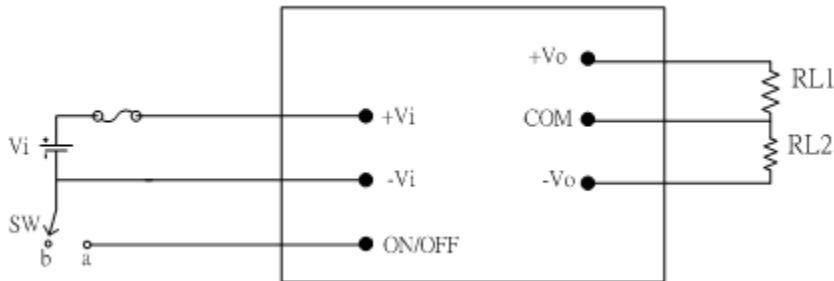
3000VDC Isolation



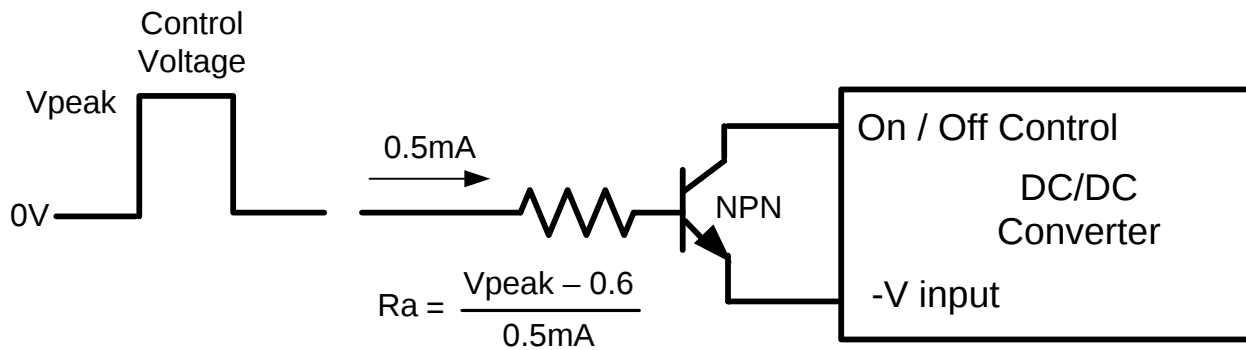
Control ON/OFF pin connection example Single Output



Dual Output



Digital Control Circuit:



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