



FEATURES:

- Wide 4:1 input range
- 24 Pin DIP Package
- High efficiency up to 87%
- Over Voltage/Overload Protection
- Operating temperature -40°C to + 85°C
- Input / Output Isolation 1600 VDC
- Continuous short circuit protection
- RoHS compliant

Models Single output



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load(uF)	Efficiency (%)
AM8TW-2403SZ	9-36	3.3	2000	1600	1330	83
AM8TW-2405SZ	9-36	5	1500	1600	1330	86
AM8TW-2412SZ	9-36	12	665	1600	288	87
AM8TW-2415SZ	9-36	15	535	1600	200	87
AM8TW-4803SZ	18-75	3.3	2000	1600	1330	82
AM8TW-4805SZ	18-75	5	1500	1600	1330	86
AM8TW-4812SZ	18-75	12	665	1600	288	87
AM8TW-4815SZ	18-75	15	535	1600	200	87

Models Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load(uF)	Efficiency (%)
AM8TW-2405DZ	9-36	±5	±800	1600	±900	84
AM8TW-2412DZ	9-36	±12	±335	1600	±133	86
AM8TW-2415DZ	9-36	±15	±265	1600	±90	87
AM8TW-4805DZ	18-75	±5	±800	1600	±900	84
AM8TW-4812DZ	18-75	±12	±335	1600	±133	87
AM8TW-4815DZ	18-75	±15	±265	1600	±90	87

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 48	9-36 18-75		VDC
Filter	π (Pi) Network			
Start up time		20		ms
Absolute Maximum Rating	24 48		-0.7-50 -0.7-100	VDC
Peak Input Voltage time			100	ms
On/Off control	ON – 3.0 ~ 12VDC (or open) OFF -0~1.2VDC (or short between pin 1 and 2/3)			
No Load Input Current		15		mA
Input reflected current		20		mA _{p-p}

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3 sec		1600	VDC
Resistance		>1000		MOhm
Capacitance		1500		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1		%
Over voltage protection	Zener Diode Clamp			%
Over current protection		150		%
Short Circuit protection		Continuous		
Short circuit restart		Auto-Recovery		
Line voltage regulation	HL-LL	±0.2		% of Vin
Load voltage regulation (Single)	0 – 100% load	±0.5		%
Load voltage regulation (Dual)	0 – 100% load	±1		%
Temperature coefficient		±0.02		%/°C
Ripple & Noise	20MHz Bandwidth	75		mV p-p
Minimum Load Current		0		% of Max

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	270		KHz
Operating temperature	Derating above +70	-40 to +85		°C
Storage temperature		-40 to +125		°C
Maximum case temperature			105	°C
Cooling		Free air convection		
Humidity			95	% RH
Case material		Nickel plated Cooper		
Weight		18		g
Dimensions (L x W x H)		1.25 x 0.80 x 0.12 inches	31.80 x 20.30 x 10.20 mm	
MTBF		> 1,000,100 hours(MIL-HDBK-217F , Ground Benign, t=+25°C)		
Maximum soldering temperature	1.5mm from case for 10sec		260	°C
Transient recovery time		250		µS
Transient recovery deviation		±3		%

Safety Specifications

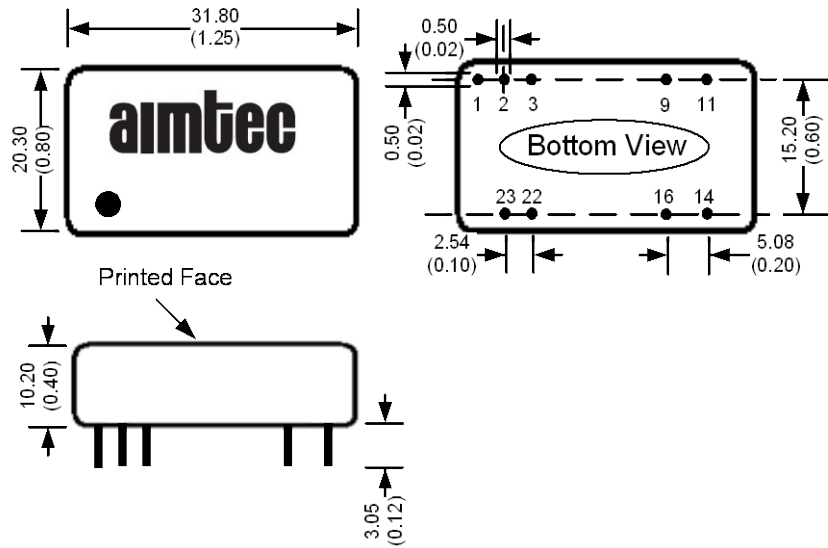
Parameters	
Agency Approval	CE
Standards	EN55022 Class A, EN55024
	IEC61000-4-2, Perf. Criteria B
	IEC61000-4-3, Perf. Criteria A
	IEC61000-4-4, Perf. Criteria B (external 330µF/100V cap required)
	IEC61000-4-5, Perf. Criteria B (external 330µF/100V cap required)
	IEC61000-4-6, Perf. Criteria A
	IEC61000-4-8, Perf. Criteria A

Pin Out Specifications

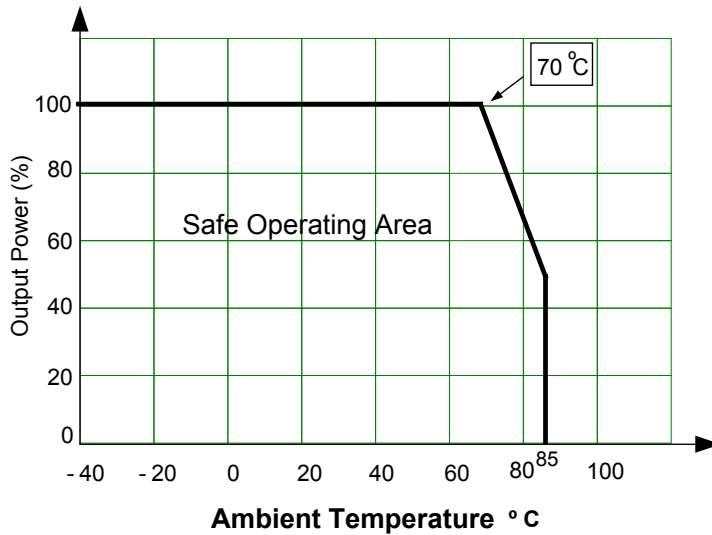
Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-V Input	-V Input
3	-V Input	-V Input
9	No Pin	Common
11	N.C.	-V Output
14	+V Output	+V Output
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input

N.C.: Not Connected

Dimensions

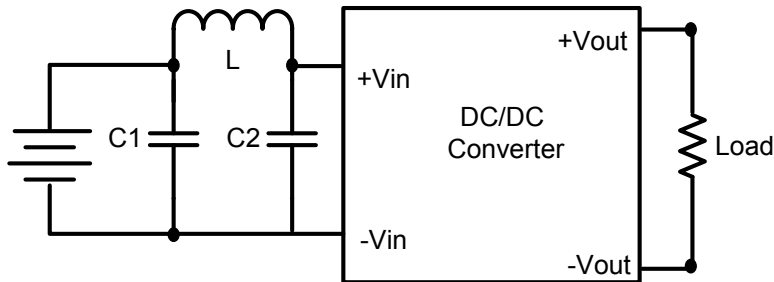


Derating



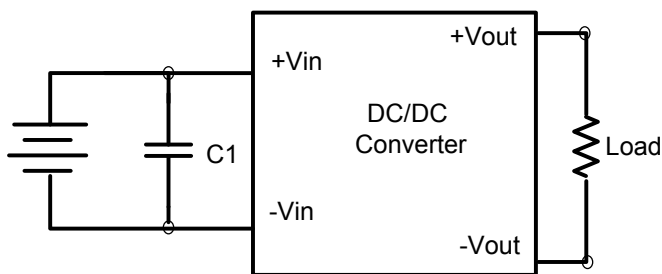
Recommended Circuits

Conducted Emissions



C1	L	C2
2.2uF, 100V	12uH	2.2uF, 100V

Surge/EFT



C1
330uF, 100V

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