



FEATURES:

- RoHS compliant
- Full SMD technology
- Wide 2:1 input range
- High efficiency up to 86%
- Pin compatible with multiple manufacturers
- Operating temperature -40°C to + 85°C
- Input/Output Isolation 1500VDC
- Continuous short circuit protection
- Low profile metal package

Models Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Capacitance load, max (μF)	Efficiency (%)
AM10E-1203SZ	9-18	3.3	2	6800	78
AM10E-1205SZ	9-18	5	2	6800	83
AM10E-1207SZ	9-18	7.2	1.38	1000	82
AM10E-1209SZ	9-18	9	1.111	1000	84
AM10E-1212SZ	9-18	12	0.833	1000	85
AM10E-1215SZ	9-18	15	0.666	1000	84
AM10E-1218SZ	9-18	18	0.55	470	84
AM10E-1224SZ	9-18	24	0.416	470	85
AM10E-2403SZ	18-36	3.3	2	6800	78
AM10E-2405SZ	18-36	5	2	6800	83
AM10E-2407SZ	18-36	7.2	1.38	1000	83
AM10E-2409SZ	18-36	9	1.111	1000	83
AM10E-2412SZ	18-36	12	0.833	1000	85
AM10E-2415SZ	18-36	15	0.666	1000	86
AM10E-2418SZ	18-36	18	0.55	470	86
AM10E-2424SZ	18-36	24	0.416	470	86
AM10E-4803SZ	36-72	3.3	2	6800	78
AM10E-4805SZ	36-72	5	2	6800	84
AM10E-4807SZ	36-72	7.2	1.38	1000	84
AM10E-4809SZ	36-72	9	1.111	1000	84
AM10E-4812SZ	36-72	12	0.833	1000	86
AM10E-4815SZ	36-72	15	0.666	1000	85
AM10E-4818SZ	36-72	18	0.55	470	85
AM10E-4824SZ	36-72	24	0.416	470	85

Models Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Capacitance load, max (μF)	Efficiency (%)
AM10E-1203DZ	9-18	±3.3	±1	±3300	78
AM10E-1205DZ	9-18	±5	±1	±3300	83
AM10E-1207DZ	9-18	±7.2	±0.69	±680	80
AM10E-1209DZ	9-18	±9	±0.555	±680	80
AM10E-1212DZ	9-18	±12	±0.416	±680	85
AM10E-1215DZ	9-18	±15	±0.333	±330	85
AM10E-1218DZ	9-18	±18	±0.27	±220	80
AM10E-1224DZ	9-18	±24	±0.208	±220	85
AM10E-2403DZ	18-36	±3.3	±1	±3300	78
AM10E-2405DZ	18-36	±5	±1	±3300	84

Models

Dual output (continued)

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Capacitance load, max (μF)	Efficiency (%)
AM10E-2407DZ	18-36	±7.2	±0.69	±680	80
AM10E-2409DZ	18-36	±9	±0.555	±680	80
AM10E-2412DZ	18-36	±12	±0.416	±680	85
AM10E-2415DZ	18-36	±15	±0.333	±330	86
AM10E-2418DZ	18-36	±18	±0.27	±220	80
AM10E-2424DZ	18-36	±24	±0.208	±220	85
AM10E-4803DZ	36-72	±3.3	±1	±3300	78
AM10E-4805DZ	36-72	±5	±1	±3300	85
AM10E-4807DZ	36-72	±7.2	±0.69	±680	80
AM10E-4809DZ	36-72	±9	±0.555	±680	80
AM10E-4812DZ	36-72	±12	±0.416	±680	86
AM10E-4815DZ	36-72	±15	±0.333	±330	86
AM10E-4818DZ	36-72	±18	±0.27	±220	80
AM10E-4824DZ	36-72	±24	±0.208	±220	85

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	12	9-18		VDC
	24	18-36		
	48	36-72		
Filter		Capacitor		
Turn on Transient process time			350	ms
Start up time		20		ms
Absolute Maximum Rating	12 Vin	-0.7-24		VDC
	24 Vin	-0.7-40		
	48 Vin	-0.7-80		
Peak Input Voltage time		100		ms

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested voltage	3 sec	1500		VDC
Resistance		> 1000		MOhm
Capacitance		500		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1		%
Voltage balance	Dual output	±1		%
Short Circuit protection	Continuous			
Short circuit restart	Automatic			
Over load protection		130		%
Line voltage regulation (Single)	HL-LL	±0.5		%
Line voltage regulation (Dual)	HL-LL	±0.5		%
Load voltage regulation (Single)	10-100%	±0.5		%
Load voltage regulation (Dual)	10-100%	±0.5		%
Temperature coefficient		±0.02		% °C
Ripple & Noise	At 20MHz Bandwidth	100		mVp-p
Rising time		10		ms

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	200		KHz
Operating temperature		-40 to +85		°C
Storage temperature		-55 to +125		°C
Case temperature			100	°C
Derating		Non-Required		
Cooling		Free air convection		
Humidity	Non condensing		95	%
Case material		Nickel coated copper		

General Specifications (continued)

Parameters	Conditions	Typical	Maximum	Units
Weight		30		g
Dimensions	Tolerance ±0.5mm	2.00 x 1.00 x 0.4 inches	50.8 x 25.4 x 10.16 mm	
MTBF		> 1 121 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		

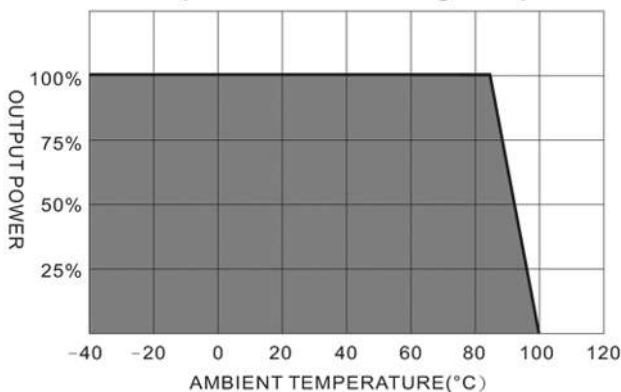
Safety Specifications

Standards	
Safety	IEC60950-1:2001; EN 55022 – Class A; EN 55024 – Class A; IEC61000-4-2 ; IEC61000-4-3
Agency approvals	CE

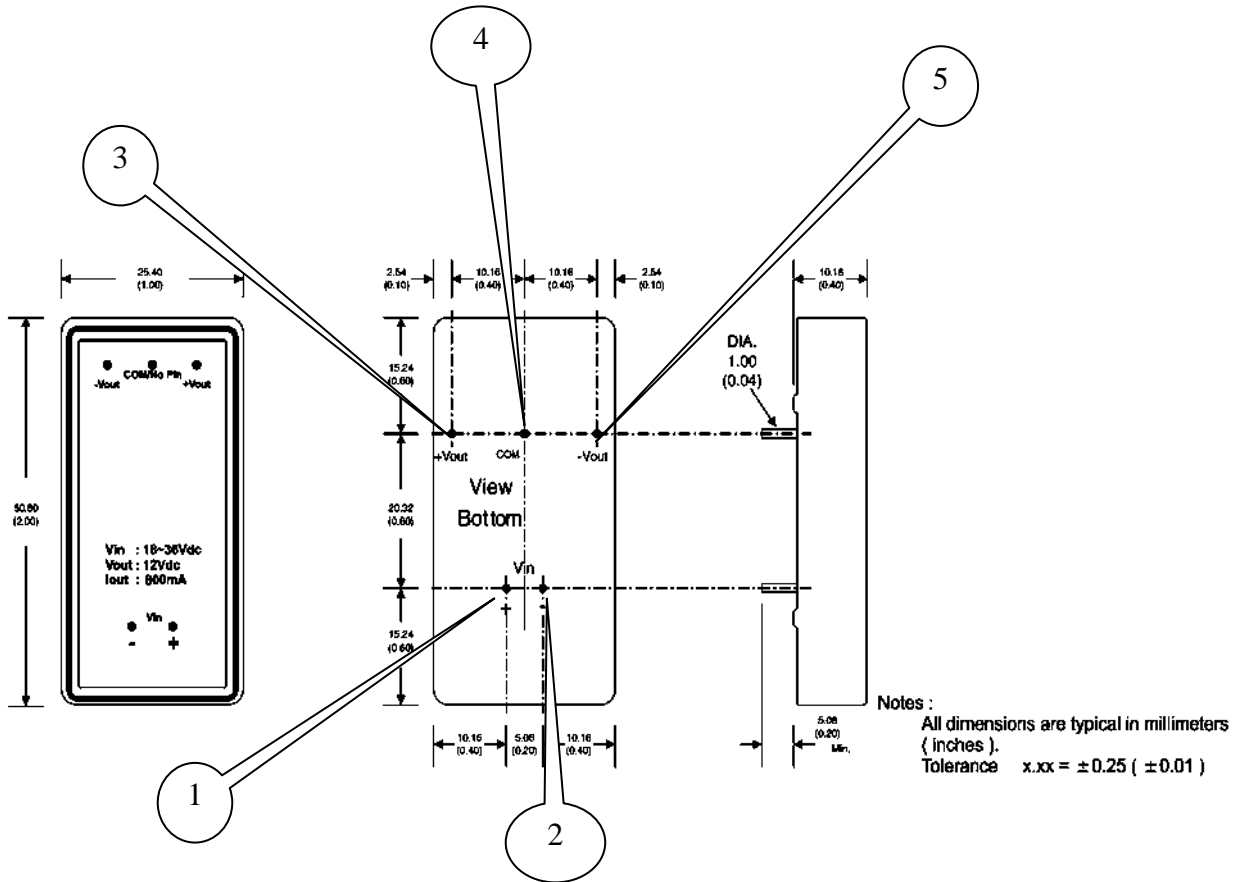
Pin Out Specifications

Pin	Single	Dual
1	+V Input	+V Input
2	-V Input	-V Input
3	+V Output	+V Output
4	No Pin.	Common.
5	-V Output	-V Output

Temperature Derating Graph



Dimensions (Bottom view)



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