Series AM15E-IZ

15 Watt | DC-DC Converter



RoHS

FEATURES:

- RoHS compliant
- 2:1 input range
- Low ripple and noise
- Remote On/Off control
- Power modules for PCB mounting
- Regulated output
- Operating temperature range: -40 to +75ºC
- Capacitive loading up to 41000 µF (36-75V input)

Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise % Vout, max	Isolation (VDC)	Efficiency (%)
AM15E-1203SIZ	9-18	3.3	4	80mV p-p	1500	75
AM15E-1205SIZ	9-18	5	3	80mV p-p	1500	83
AM15E-1212SIZ	9-18	12	1.25	1	1500	85
AM15E-1215SIZ	9-18	15	1	1	1500	85
AM15E-2403SIZ	18-36	3.3	4	80mV p-p	1500	81
AM15E-2405SIZ	18-36	5	3	80mV p-p	1500	83
AM15E-2412SIZ	18-36	12	1.25	1	1500	88
AM15E-2415SIZ	18-36	15	1	1	1500	87
AM15E-4803SIZ	36-75	3.3	4	80mV p-p	1500	81
AM15E-4805SIZ	36-75	5	3	80mV p-p	1500	83
AM15E-4812SIZ	36-75	12	1.25	1	1500	88
AM15E-4815SIZ	36-75	15	1	1	1500	87

Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise % Vout, max	Isolation (VDC)	Efficiency (%)
AM15E-2405DIZ	9-18	±5	±1.5	1	1500	85
AM15E-2412DIZ	9-18	±12	±0.62	1	1500	85
AM15E-2415DIZ	9-18	±15	±0.5	1	1500	85
AM15E-2405DIZ	18-36	±5	±1.5	1	1500	83
AM15E-2412DIZ	18-36	±12	±0.62	1	1500	88
AM15E-2415DIZ	18-36	±15	±0.5	1	1500	87
AM15E-4805DIZ	36-75	±5	±1.5	1	1500	83
AM15E-4812DIZ	36-75	±12	±0.62	1	1500	88
AM15E-4815DIZ	36-75	±15	±0.5	1	1500	87

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage range		9-18 18-36 37-75		VDC
Filter		π (Pi) Network		

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Rated voltage		1500		VDC
Resistance		> 1000		MOhm
Capacitance		1000		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy			±2	%
Short Circuit protection	Auto recovery	Continuous,		
Over voltage protection	Zener diode clamp protection			
Over load protection	Over 110% full load and recovers automatically			
Line voltage regulation (Single)	HL-LL		±0.5	%
Line voltage regulation (Dual)	HL-LL		±0.5	%
Load voltage regulation (Single)	25-100%		±0.5	%
Load voltage regulation (Dual)	25-100%		±2	%
Temperature coefficient		±0.05		%/°C

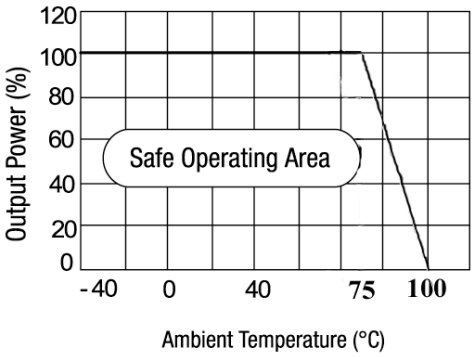
General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	200		KHz
Operating temperature	Without derating	-40 to+75		°C
Storage temperature		-55 to +115		°C
Case temperature			95	°C
Cooling	Free air convection			
Humidity	Non condensing		95	%
Case material		Nickel coated copper		
Weight		33		g
Dimensions	2.00 x 1.0 x 0.4 inches		50.8 x 25.4 x 10.2 mm	
MTBF	> 800 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

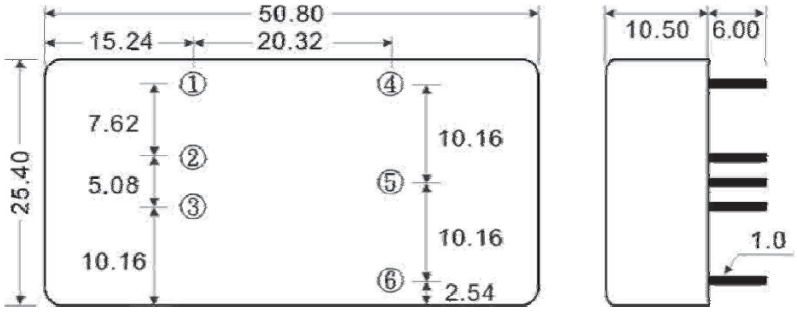
Pin Out Specifications

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

Temperature Derating Graph

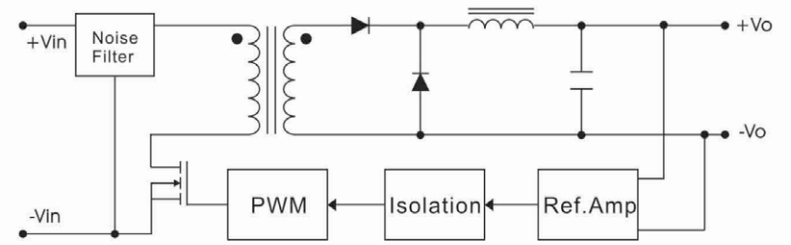


Dimensions



Block diagram

Single Output



Dual Output

