Series AM15EW-IZ

15 Watt | DC-DC Converter

RoHS

FEATURES:

- RoHS compliant
- Wide 4:1 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 4500 µF (18-75V input)

Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise % Vout, **max**	Isolation (VDC)	Efficiency (%)
AM15EW-2403SIZ	9-36	3.3	4	80mV p-p	1500	77
AM15EW-2405SIZ	9-36	5	3	80mV p-p	1500	80
AM15EW-2412SIZ	9-36	12	1.25	1	1500	85
AM15EW-2415SIZ	9-36	15	1	1	1500	84
AM15EW-4803SIZ	18-75	3.3	4	80mV p-p	1500	77
AM15EW-4805SIZ	18-75	5	3	80mV p-p	1500	80
AM15EW-4812SIZ	18-75	12	1.25	1	1500	85
AM15EW-4815SIZ	18-75	15	1	1	1500	84

Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise % Vout, **max**	Isolation (VDC)	Efficiency (%)
AM15EW-2405DIZ	9-36	±5	±1.5	1	1500	80
AM15EW-2412DIZ	9-36	±12	±0.625	1	1500	85
AM15EW-2415DIZ	9-36	±15	±0.5	1	1500	84
AM15EW-4805DIZ	18-72	±5	±1.5	1	1500	80
AM15EW-4812DIZ	18-72	±12	±0.625	1	1500	85
AM15EW-4815DIZ	18-72	±15	±0.5	1	1500	84

Input Specifications

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

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Rated voltage	60 sec	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	Auto recovery	Over 110% full load		
Line voltage regulation (Single)	HL-LL		±0.5	%

Output Specifications (continued)

Parameters	Conditions	Typical	Maximum	Units
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

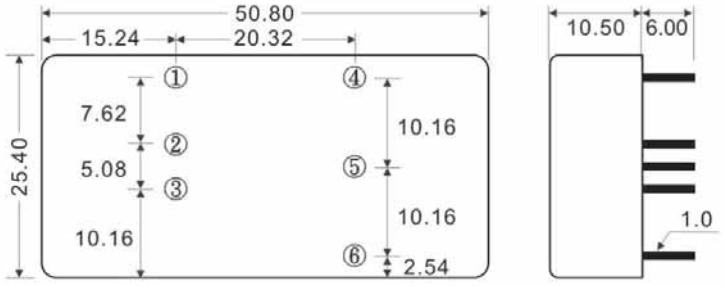
General Specifications

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 with non-conductive base			
Weight		33		g
Dimensions	Tolerance ±0.5mm	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)			

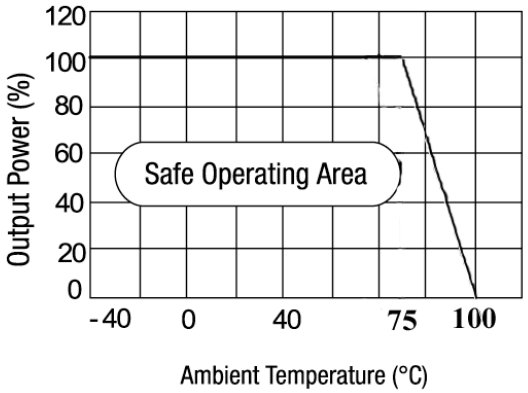
Pin Out Specifications

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

Dimensions

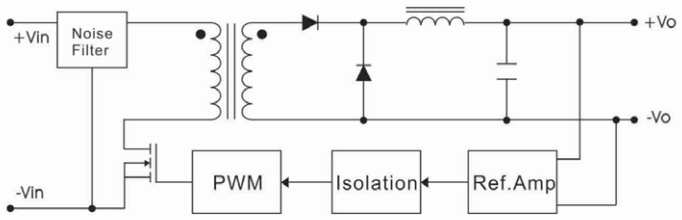


Temperature Derating Graph



Block diagram

Single Output



Dual Output