

EC3AW

S E R I E S

3 WATT 4:1 INPUT RANGE DC-DC CONVERTERS



Features

- 3W Isolated Output
- 4 : 1 Input Range
- DIP-24 / SMD Package
- Regulated Outputs
- Efficiency to 80%
- Pi Input Filter
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC3AW01	9-36VDC	5 VDC	600 mA	15 mA	174 mA	72	DIP-24
EC3AW02		12 VDC	250 mA	15 mA	165 mA	76	
EC3AW03		15 VDC	200 mA	15 mA	165 mA	76	
EC3AW04		±5 VDC	±300 mA	25 mA	179 mA	70	
EC3AW05		±12 VDC	±125 mA	25 mA	174 mA	72	
EC3AW06		±15 VDC	±100 mA	25 mA	174 mA	72	
EC3AW07		3.3 VDC	600 mA	15 mA	117 mA	70	
EC3AW11	18-72VDC	5 VDC	600 mA	7.5 mA	87 mA	72	DIP-24
EC3AW12		12 VDC	250 mA	7.5 mA	81 mA	77	
EC3AW13		15 VDC	200 mA	7.5 mA	81 mA	77	
EC3AW14		±5 VDC	±300 mA	12 mA	88 mA	71	
EC3AW15		±12 VDC	±125 mA	12 mA	87 mA	72	
EC3AW16		±15 VDC	±100 mA	12 mA	87 mA	72	
EC3AW17		3.3 VDC	600 mA	7.5 mA	58 mA	70	

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....24V.....9-36V
 48V.....18-72V
 Input Filter.....Pi Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....±2.0% max.
 Voltage Balance (Dual).....±1.0% max.
 Temperature Coefficient.....±0.05%/°C
 Ripple and Noise, 20MHz BW, Single & ±5V100mV p-p max.
 Dual.....1% p-p max.
 Short Circuit Protection.....Continuous
 Line Regulation¹, Single/Dual.....± 0.5% max.
 Load Regulation, Single².....± 0.5% max.
 Dual³.....± 1.0% max.

GENERAL SPECIFICATIONS:

Efficiency.....See Table
 Isolation Resistance.....10⁹ Ohms
 Switching Frequency.....100KHz min.
 Operating Ambient Temperature Range-25°C to +71°C
 De-rating, Above 71°C (Plastic Case).....Linearly to Zero power at 95°C
 De-rating, Above 71°C (Copper Case).....Linearly to Zero power at 100°C
 Case Temperature (Plastic case⁴)95°C max
 (Copper case⁵)100°C max
 Cooling Natural Convection
 Storage Temperature Range.....-40°C to +100°C
 Dimensions.....DIP.....1.25 x 0.80 x 0.40 inches (31.8 x 20.3 x 10.2mm)
 SMD.....1.25 x 0.80 x 0.45 inches (31.8 x 20.3 x 11.4mm)
 Weight.....12.5g

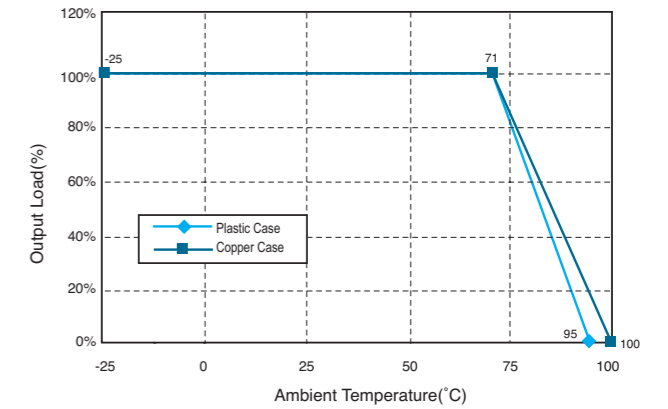
ISOLATION VOLTAGE:

500 VDC min.....Standard Models
 3K VDC min⁴.....Suffix "H" Models
 15K VDC min.....Suffix "HM" Models

CASE MATERIAL:

Standard Models.....Non-Conductive Black Plastic
 Suffix "M" Models⁵.....Black Coated Copper with
 Non-Conductive Base

EC3AW Series Derating Curve



NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 10% Load
3. Measured From Full Load to 1/4 Load
4. Non-Conductive Black Plastic Only
5. Suffix "S" to the Model Number with SMD packages
6. Maximum case temperature under any operating condition should not exceed 95°C (Plastic Case), 100°C (Copper Case).

PIN CONNECTION

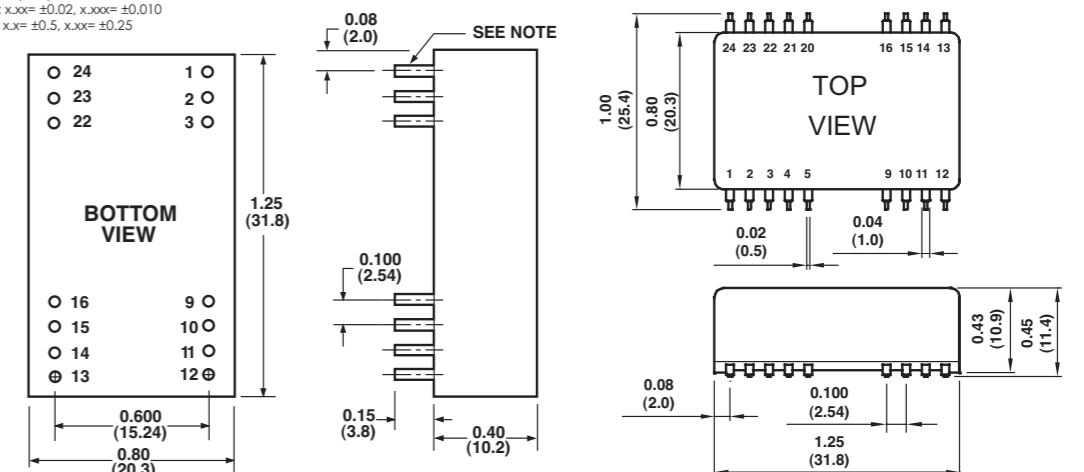
Pin	500 VDC				1.5K & 3K VDC				
	Single Output		Dual Output		Single Output		Dual Output		
	DIP	SMD	DIP	SMD	DIP	SMD	DIP	SMD	
1,24	+V Input		+V Input		1,24	NP	NC	NP	NC
2,23	NC		-V Output		2,3	-V Input		-V Input	
3,22	NC		Common		4,5	NP	NC	NP	NC
4	NP	NC	NP	NC	9	NC		Common	
5	NP	NC	NP	NC	10,15	NC		NC	
9	NP	NC	NP	NC	11	NC		-V Output	
10,15	-V Output		Common		12,13	NP	NC	NP	NC
11,14	+V Output		+V Output		14	+V Output		+V Output	
12,13	-V Input		-V Input		16	-V Output		Common	
16	NP	NC	NP	NC	20,21	NP	NC	NP	NC
20,21	NP	NC	NP	NC	22,23	+V Input		+V Input	

*NP-NO PIN

*NC-NO CONNECTION WITH PIN

CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA
 All Dimensions In Inches (mm)
 Tolerance Inches: x.xx=±0.02, x.xxx=±0.010
 Millimeters: x.x=±0.5, x.xx=±0.25



All Specifications Typical At Nominal Line, Full Load and 25°C Unless Otherwise Noted.