

EC4AW-H6 Series



Features:

- 5-6W Isolated Output
- DIP-24 Package
- Regulated Outputs
- Efficiency to 85%
- Continuous Short Circuit Protection
- I/O Isolation Voltage 6000VDC
- Reinforced Insulation Rated For Working Voltage 300VAC
- 5 uA Leakage Current
- EMI Meets EN55022 Class A
- Safety Meets UL60950-1 and UL60601-1
- CE Mark Meets 2004/108/EC



EC4AW-H6 Specifications

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		%EFF.		CAPACITIVE LOAD MAX.
			MN.	MAX.	NO LOAD	FULL LOAD	(2)	(3)	
EC4AW-24S05H6	9-36VDC	5.0VDC	100mA	1000mA	10mA	260mA	81	80	1000uF
EC4AW-24S12H6	9-36VDC	12VDC	50mA	500mA	10mA	295mA	85.5	85	500uF
EC4AW-24D12H6	9-36VDC	±12VDC	25mA	±250mA	15mA	298mA	84.5	84	250uF
EC4AW-24D15H6	9-36VDC	±15VDC	20mA	±200mA	15mA	298mA	84.4	84	200uF
EC4AW-48S05H6	18-72VDC	5VDC	100mA	1000mA	5mA	130mA	81	80	1000uF
EC4AW-48S12H6	18-72VDC	12VDC	50mA	500mA	5mA	149mA	85	84	500uF
EC4AW-48D126	18-72VDC	±12VDC	25mA	±250mA	8mA	150mA	84	83	250uF
EC4AW-48D15H6	18-72VDC	±15VDC	20mA	±200mA	8mA	149mA	85	84	200uF

- NOTE:
1. Nominal Input Voltage 24 or 48VDC
 2. Measured at 12VDC for 24Vin Models, 24VDC for 48Vin Models
 3. Measured at Nominal Input Voltage
 4. Operation Under Minimum Load Will not Damage The Converter, But It May not Meet All Specifications

SPECIFICATIONS

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

INPUT SPECIFICATIONS:

Input Voltage Range.....	24Vin	9-36V
	48Vin	18-72V
Under Voltage Protection	24Vin power up	8.8V typ.
	24Vin power down	8V typ.
	48Vin power up	17V typ.
	48Vin power down	16V typ.
Leakage Current		5uA max.
Input Filter		Pi Type
Input Surge (100ms max.)	24Vin	50V max.
	48Vin	100V max.

OUTPUT SPECIFICATIONS:

Voltage Accuracy		±1.5% max.
Voltage Balance (Dual)		±2.0% max.
Transient Response: 75% - 100% Step Load Change		
Error Band		±6% Vout nominal
Recovery Time		< 500us
Ripple & Noise, 20MHz BW (with 0.1uF MLCC)	5V	100mV pk-pk max.
	12V/15V ...	1% pk-pk max.
Temperature Coefficient		±0.05%/°C
Line Regulation (note1)		±0.5% max.
Load Regulation	Single (note2)	±0.5% max.
	Dual (note3)	±1.0% max.
Cross Regulation(Dual output) Load cross variation 25%/100%		±5% max.
Output Short Circuit Protection		Continuous
Start up time		1.5ms typ.

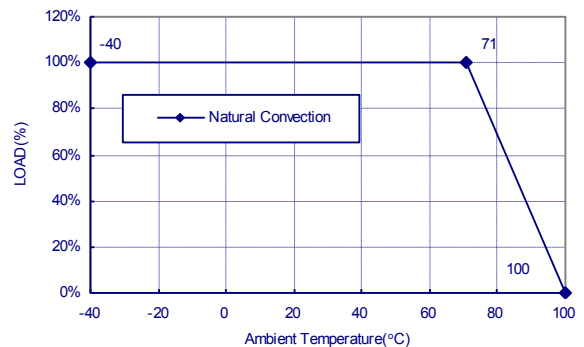
GENERAL SPECIFICATIONS:

Efficiency	See Table	
Isolation Voltage	6000VDC min.	
Isolation Resistance	10 ⁹ ohm min.	
Isolation Capacitance	40pF typ.	
Reinforced Insulation	Creepage Distances	8mm min.
	Air Clearances	8mm min.
Switching Frequency	100KHz min.	
Operating Ambient Temperature	-40°C to +71°C	
De-rating, Above 71°C	Linearly to Zero power at 100°C	
Case Temperature (note4)	100°C max.	
Storage Temperature	-40°C to +100°C	
EMI	Conductive EMI Meet EN55022 Class A	
Humidity	95% RH max. Non condensing	
MTBF	MIL-STD-217-F, GB, 25°C, Full Load	T.B.D hrs
Dimensions	1.25x0.80x0.40 inches (31.8x20.3x10.2 mm)	
Case Material	Non-Conductive Black Plastic	
Weight	T.B.D g	

NOTE:

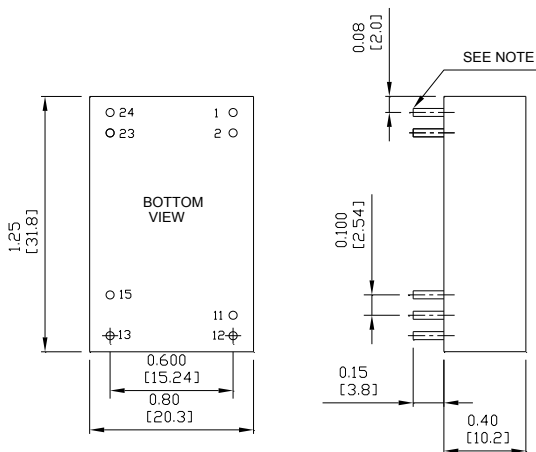
1. Measured from high line to low line.
2. Measured from full load to 10% load.
3. Measured from full load to 25% load.
4. Maximum case temperature under any operating condition should not be exceeded 100°C.

Typical Derating curve for Natural Convection



Case A Dimensions:

NOTE: Pin Size is 0.02; \varnothing 002 Inch (0.5; \varnothing 05 mm) DIA
 All Dimensions In Inches (mm)
 Tolerances Inches: X.XX= j \varnothing 02, X.XXX= j \varnothing 010
 Millimeters: X.X= j \varnothing 5, X.XX= j \varnothing 25



PIN CONNECTION		
Pin	Single Output	Dual Output
1	+V Input	+V Input
2	+V Input	+V Input
11	NP	Common
12	-V Output	NP
13	+V Output	-V Output
15	NP	+V Output
23	-V Input	-V Input
24	-V Input	-V Input

* NC-NO CONNECTION WITH PIN
 * NP-NO PIN