



5-6W Module DC to DC power supply < EC4AB



H/HM Versions Only

FEATURES

- * 5-6W Isolated Output
- * DIP-24/SMD Package
- * Efficiency to 84%
- * Regulated Outputs
- * Pi Input Filter
- * Continuous Short Circuit Protection
- * Meets EN55022 Class B, Conducted
- * Remote ON/OFF (Option)



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC4AB01	9-18VDC	5VDC	1000 mA	7.5 mA	548 mA	76	DIP-24
EC4AB02	9-18VDC	12VDC	470 mA	7.5 mA	588 mA	80	DIP-24
EC4AB03	9-18VDC	15VDC	400 mA	7.5 mA	617 mA	81	DIP-24
EC4AB04	9-18VDC	±12VDC	±230 mA	12 mA	568 mA	81	DIP-24
EC4AB05	9-18VDC	±15VDC	±190 mA	12 mA	586 mA	81	DIP-24
EC4AB06	9-18VDC	±5VDC	±500 mA	12 mA	548 mA	76	DIP-24
EC4AB07	9-18VDC	3.3VDC	1000 mA	7.5 mA	382 mA	72	DIP-24
EC4AB11	18-36VDC	5VDC	1000 mA	5 mA	264 mA	79	DIP-24
EC4AB12	18-36VDC	12VDC	470 mA	5 mA	283 mA	83	DIP-24
EC4AB13	18-36VDC	15VDC	400 mA	5 mA	298 mA	84	DIP-24
EC4AB14	18-36VDC	±12VDC	±230 mA	7.5 mA	284 mA	81	DIP-24
EC4AB15	18-36VDC	±15VDC	±190 mA	7.5 mA	290 mA	82	DIP-24
EC4AB16	18-36VDC	±5VDC	±500 mA	7.5 mA	264 mA	79	DIP-24
EC4AB17	18-36VDC	3.3VDC	1000 mA	5 mA	188 mA	73	DIP-24
EC4AB21	36-72VDC	5VDC	1000 mA	2 mA	132 mA	79	DIP-24
EC4AB22	36-72VDC	12VDC	470 mA	2 mA	143 mA	82	DIP-24
EC4AB23	36-72VDC	15VDC	400 mA	2 mA	154 mA	81	DIP-24
EC4AB24	36-72VDC	±12VDC	±230 mA	3 mA	142 mA	81	DIP-24
EC4AB25	36-72VDC	±15VDC	±190 mA	3 mA	148 mA	80	DIP-24
EC4AB26	36-72VDC	±5VDC	±500 mA	3 mA	132 mA	79	DIP-24
EC4AB27	36-72VDC	3.3VDC	1000 mA	3 mA	94 mA	73	DIP-24

NOTE: 1.Nominal Input voltage 12, 24 or 48 VDC



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SPECIFICATIONS

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

INPUT SPECIFICATIONS:

Input Voltage Range	12V	9-18V
	24V	18-36V
	48V	36-72V

Positive Logic Remote ON/OFF (see note6)

Input Filter Pi Type

OUTPUT SPECIFICATIONS:

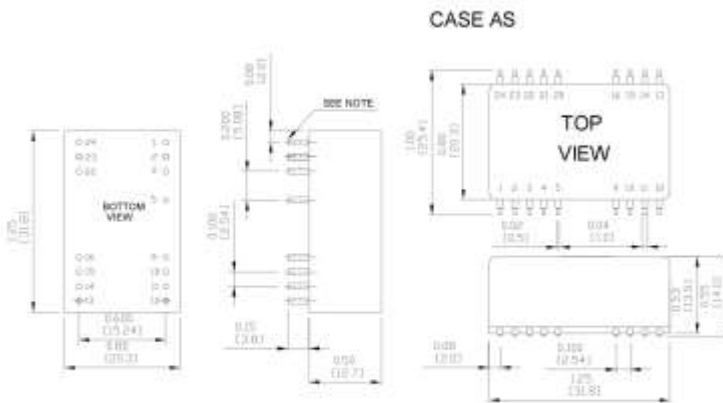
Voltage Accuracy	±2.0% max.
Voltage Balance (Dual)	±1.0% max.
Temperature Coefficient	±0.05%/°C
Ripple & Noise, 20MHz BW	3.3V/5V 100mV pk-pk max. 12V/15V 1% pk-pk max.
Short Circuit Protection	Continuous
Line Regulation (note1) Single/Dual	±0.5% max.
Load Regulation (note2) Single	±0.5% max.
Dual (note3)	±1.0% max.

GENERAL SPECIFICATIONS:

Efficiency	See Table
Isolation Resistance	10 ⁹ ohm min.
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 case note8)	95°C max.
(Copper case note8)	100°C max.
Cooling	Natural Convection
Storage Temperature Range	-40°C to +100°C
EMI/RFI	Conductive EMI Meet EN55022 Class B
Dimensions	DIP 1.25×0.80×0.50 inches(31.8×20.3×12.7 mm) SMD 1.25×0.80×0.55 inches(31.8×20.3×14.0 mm)
Weight	15g

Case A Dimensions:

NOTE: Pin Size is 0.02±0.002 Inch (0.5±0.05 mm) DIA
 All Dimensions In Inches (mm)
 Tolerances Inches: X.XX= ±0.02 , X.XXX= ±0.010
 Millimeters: X.X= ±0.5 , X.XX= ±0.25



ISOLATION VOLTAGE:

500 VDC min.	Standard Models
3K VDC min. (note4)	Suffix "H" Models
1.5K VDC min.	Suffix "HM" Models

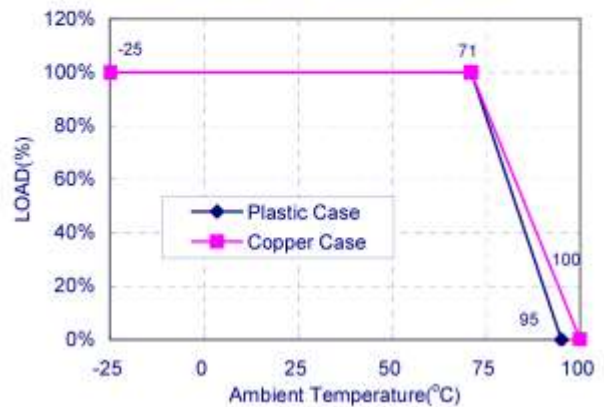
CASE MATERIAL:

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

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 "T" to the model number with remote on/off for 'H'/'HM' versions only.
6. Logic Compatibility CMOS or Open Collector TTL. ref. to -Vin
 Module on >5.5VDC or open circuit
 Module off <1.8Vdc.
 Shutdown Idle 10mA
 Control Common referenced to input minus
7. Suffix "S" to the model number with SMD packages.
8. Maximum case temperature under any operating condition should not be exceeded 95°C (Plastic Case), 100°C (Copper Case).

Typical Derating curve for Natural Convection



Pin	PIN CONNECTION						
	500 VDC				1.5K & 3K VDC		
	Single Output		Dual Output		Pin	Single Output	Dual Output
	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	-V Input	-V Input
3,22	NC	Common	4	NP	NC	NP	NC
4	NP	NC	NP	NC	5	NP/ Remote On/Off, Remote On/Off	NP/ Remote On/Off, Remote On/Off
5	NP	NC	NP	NC	9	NC	Common
9	NP	NC	NP	NC	10,15	NC	NC
10,15	-V Output	Common	11	NC	-V Output	-V Output	-V Output
11,14	+V Output	+V Output	12,13	NP	NC	NP	NC
12,13	-V Input	-V Input	14	+V Output	+V Output	+V Output	+V Output
16	NP	NC	NP	NC	18	-V Output	Common
20	NP	NC	NP	NC	20,21	NP	NC
21	NP	NC	NP	NC	22,23	+V Input	+V Input

* NC:NO CONNECTION WITH PIN
 * NP:NO PIN
 * Remote On/Off (Option)