

4AB Series

5W-6W Wide Input DC-DC Converters

Features

- 5W-6W Isolated Output
- 24-Pin DIP Package
- Efficiency to 82%
- 2:1 Input Range
- Regulated Outputs
- Pi Input Filter
- Continuous Short Circuit Protection
- Conductive EMI meet EN55022 Class B
- Remote On/Off option

Model Number	Input Voltage	Output Voltage	Output Current	Input Current		% Efficiency	Case
				No Load	Full Load		
4AB-01	9-18VDC	5 VDC	1000 mA	7.5 mA	545 mA	76	A
4AB-02		12 VDC	470 mA	7.5mA	585 mA	80	
4AB-03		15 VDC	400 mA	7.5mA	625 mA	80	
4AB-04		±12 VDC	±230 mA	12 mA	575 mA	80	
4AB-05		±15 VDC	±190 mA	12 mA	590 mA	80	
4AB-06		±5 VDC	±500 mA	12mA	545 mA	76	
4AB-07		3.3 VDC	1000 mA	7.5 mA	405 mA	68	
4AB-11	18-36VDC	5 VDC	1000 mA	5mA	265 mA	78	A
4AB-12		12 VDC	470 mA	5mA	285 mA	82	
4AB-13		15 VDC	400 mA	5mA	305 mA	82	
4AB-14		±12 VDC	±230 mA	7.5mA	285 mA	81	
4AB-15		±15 VDC	±190 mA	7.5mA	295 mA	81	
4AB-16		±5 VDC	±500 mA	7.5 mA	265 mA	78	
4AB-17		3.3 VDC	1000 mA	5mA	195 mA	70	
4AB-21	18-36VDC	5 VDC	1000 mA	2mA	133 mA	78	A
4AB-22		12 VDC	470 mA	2mA	145 mA	81	
4AB-23		15 VDC	400 mA	2mA	154 mA	81	
4AB-24		±12 VDC	±230 mA	3mA	142 mA	81	
4AB-25		±15 VDC	±190 mA	3mA	147 mA	81	
4AB-26		±5 VDC	±500 mA	3 mA	265 mA	78	
4AB-27		3.3 VDC	1000 mA	2mA	98 mA	70	

Note: Nominal Input Voltage 12, 24 or 48VDC

Specifications

Input Specifications:

Input Voltage

Range.....	12V.....	9-18V
	24V.....	18-36V
	48V.....	36-72V

Input Filter.....Pi Type

Output Specifications:

Voltage Accuracy.....+/- 2.0 % max.

Voltage Balance (Dual).....+/- 1.0 % max.

Ripple & Noise, 20 MHz BW.....3.3V / 5V..... 100 mV p-p max.
 12V / 15V.....1% p-p max.

Temperature Coefficient..... +/- 0.05 % / °C max.

Short Circuit Protection.....Continuous

Line Regulation ¹ Single / Dual Output.....+/- 0.5 % max.

Load Regulation ² Single.....+/- 0.5 % max.
 Dual³.....+/- 1.0 % max.

General Specifications:

Efficiency.....see table

Isolation Resistance.....100Mohm

Switching Frequency.....100 KHz, min.

Operating Temperature Range.....-25° C ~ +71° C

Case Temperature.....100° C max.

Cooling.....Free air convection

Storage Temperature Range.....-40° C ~ +100° C

EMI/RFI.....Conductive EMI meet EN55022 class B

Isolation voltage.....Standard models.....500VDC min.

Suffix "H" Models.....3K VDC min.

Dimensions.....1.25" x 0.8" x 0.4" (31.8 x 20.3 x 10.2 mm)

Case Material.....Non-Conductive Black Plastic

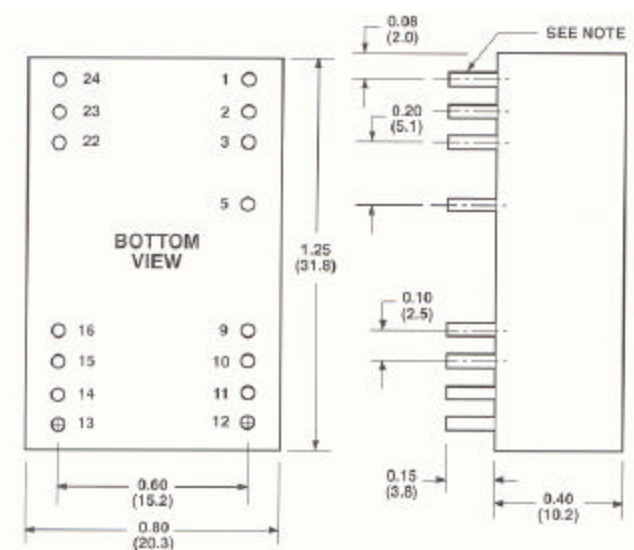
Suffix "M" Models(Material).....Black Coated Copper with

Non-conducted base

Outline Information and Pin-out

PIN CONNECTION					
500VDC			1.5K & 3K VDC		
PIN	Single Output	Dual Output	PIN	Single Output	Dual Output
1	+V input	+V input	1	NP	NP
2	NC	-V output	2	-V input	-V input
3	NC	Common	3	-V input	-V input
5	NP	NP	5	NP (Remote control)	
9	NP	NP	9	NC	Common
10	-V output	Common	10	NC	NC
11	+V output	+V output	11	NC	-V output
12	-V input	-V input	12	NP	NP
13	-V input	-V input	13	NP	NP
14	+V output	+V output	14	+V output	+V output
15	-V output	Common	15	NC	NC
16	NP	NP	16	-V output	Common
22	NC	Common	22	+V input	+V input
23	NC	-V output	23	+V input	+V input
24	+V input	+V input	24	NP	NP

Remote On/Off Control	
Logic compatibility	CMOS or Open collector TTL
Ec-On	>5.5 Vdc or open circuit
Ec-Off	<1.8 Vdc
Shutdown Idle current	10mA
Input resistance	100K ohms (Ein 0Vdc to 9Vdc)
Control common	Referenced to Input minus



* NP---No Pin

* NC---No connection with pin

All dimensions are in inches [mm]

All pins sizes are dia. 0.02" [0.508mm] and 0.14" [0.35mm] length

- 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 "HM" 1.5KVDC instead of 3KVDC isolation
 6. Suffix "T" to the Model Number with Remote On/Off for "H" 3KDC isolation only
 7. **4AB-23HT can be used in application with up to 500Vdc working voltage**

The information and specifications contained in this brief are believed to be accurate and reliable at the time of publication. Specifications are subject to change without notice. Refer to product specification sheet for performance characteristics and application guidelines.