

3AB

3 WATT WIDE INPUT DC-DC CONVERTERS

Features:

- 3W Isolated Output
- 24-Pin DIP Package
- Efficiency to 80%
- 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		% EFF.	CASE
				NO LOAD	FULL LOAD		
3AB11		5 VDC	600 mA	7.5 mA	340 mA	73	
3AB12		12 VDC	250 mA	7.5 mA	320 mA	78	
3AB13		15 VDC	200 mA	7.5 mA	329 mA	76	
3AB14	9-18 VDC	±5 VDC	±300 mA	12 mA	340 mA	73	A
3AB15		±12 VDC	±125 mA	12 mA	329 mA	76	
3AB16		±15 VDC	±100 mA	12 mA	333 mA	75	
3AB17		3.3 VDC	600 mA	7.5 mA	226 mA	73	
3AB21		5 VDC	600 mA	5 mA	168 mA	74	
3AB22		12 VDC	250 mA	5 mA	156 mA	80	
3AB23		15 VDC	200 mA	5 mA	156 mA	80	
3AB24	18-36 VDC	±5 VDC	±300 mA	7.5 mA	168 mA	74	A
3AB25		±12 VDC	±125 mA	7.5 mA	156 mA	80	
3AB26		±15 VDC	±100 mA	7.5 mA	160 mA	78	
3AB27		3.3 VDC	600 mA	5 mA	113 mA	73	
3AB31		5 VDC	600 mA	2 mA	82 mA	76	
3AB32		12 VDC	250 mA	2 mA	82 mA	77	
3AB33		15 VDC	200 mA	2 mA	82 mA	77	
3AB34	36-72 VDC	±5 VDC	±300 mA	3 mA	82 mA	76	A
3AB35		±12 VDC	±125 mA	3 mA	82 mA	76	
3AB36		±15 VDC	±100 mA	3 mA	82 mA	76	
3AB37		3.3 VDC	600 mA	3 mA	55 mA	76	

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



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Specifications

3AB SERIES

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.
Temperature Coefficient.....		± 0.05%/ °C
Ripple and Noise, 20MHz BW.....	3.3V / 5V.....	100mV p-p max.
	12V / 15V.....	1% p-p max.
Short Circuit Protection.....		Continuous
Line Regulation, Single/Dual ¹		± 0.5%
Load Regulation, Single ²		± 0.5%
Dual ³		± 1.0%

GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Resistance.....		10 ⁹ ohms
Switching Frequency.....		100KHz, min
Operating Temperature Range.....		-25°C to + 71°C
Case Temperature (Plastic case).....		95°C max.
(Copper case).....		100°C max.
Cooling.....		Free-Air Convection
Storage Temperature Range.....		-40°C to + 100°C
EMI / RFI.....		Conductive EMI Meet EN55022 Class B
Dimensions		1.25 x 0.8 x 0.5 inches (31.8 x 20.3 x 12.7mm)

ISOLATION VOLTAGE:

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

CASE MATERIAL:

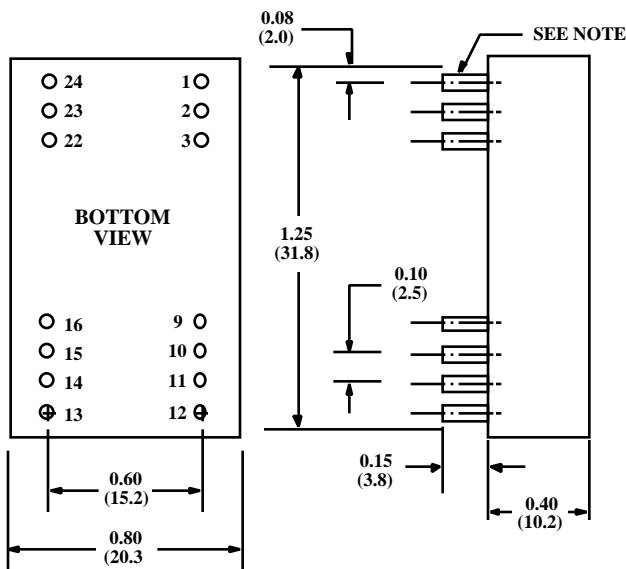
Standard Models ⁴		Non-Conductive Black Plastic
Suffix "M" Models ⁵		Black Coated Copper with Non-Conductive Base

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 "HM" 1.5K VDC Instead of 3K VDC Isolation | 6. Suffix "T" to the Model Number with Remote On/Off for "H" 3KVDC Isolation Only |

CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm/m) DIA or .020 x .014 Inch
All Dimensions In Inches(mm)



Remote On/Off Control

Logic Compatibility	CMOS or Open Collector TTL
-On	>+5.5 VDC or Open Circuit
-Off	<1.8 VDC
Shutdown Idle Current	10mA
Input Resistance	100K Ohms (Ein 0 VDC to 9VDC)
Control Common	Referenced to Input Minus

PIN CONNECTION

Pin	500 VDC		Pin	1.5K & 3K VDC	
	Single Output	Dual Output		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 On/Off)	
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

*NP-NO PIN

*NC-NO CONNECTION WITH PIN

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