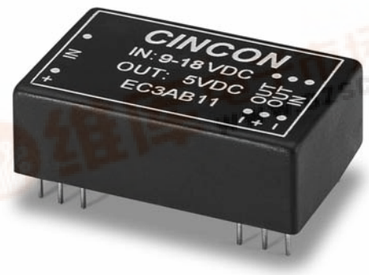
EC3AB

3 WATT WIDE INPUT DC-DC CONVERTERS

E176177 H/HM Versions Only



Features

- 3W Isolated Output
- 24-Pin DIP Package
- Efficiency to 80%
- 2:1 Input Range
- 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 NO LOAD	INPUT CURRENT FULL LOAD	% EFF.	CASE
EC3AB11		5 VDC	600 mA	7.5 mA	340 mA	73	
EC3AB12		12 VDC	250 mA	7.5 mA	320 mA	78	
EC3AB13		15 VDC	200 mA	7.5 mA	329 mA	76	
EC3AB14	9-18 VDC	±5 VDC	±300 mA	12 mA	340 mA	73	A
EC3AB15		±12 VDC	±125 mA	12 mA	329 mA	76	
EC3AB16		±15 VDC	±100 mA	12 mA	333 mA	75	
EC3AB17		3.3 VDC	600 mA	7.5 mA	236 mA	70	
EC3AB21		5 VDC	600 mA	5 mA	168 mA	74	
EC3AB22		12 VDC	250 mA	5 mA	156 mA	80	
EC3AB23		15 VDC	200 mA	5 mA	156 mA	80	
EC3AB24	18-36 VDC	±5 VDC	±300 mA	7.5 mA	168 mA	74	A
EC3AB25		±12 VDC	±125 mA	7.5 mA	156 mA	80	
EC3AB26		±15 VDC	±100 mA	7.5 mA	160 mA	78	
EC3AB27		3.3 VDC	600 mA	5 mA	113 mA	73	
EC3AB31		5 VDC	600 mA	2 mA	82 mA	76	
EC3AB32		12 VDC	250 mA	2 mA	82 mA	77	
EC3AB33		15 VDC	200 mA	2 mA	82 mA	77	
EC3AB34	36-72 VDC	±5 VDC	±300 mA	3 mA	82 mA	76	A
EC3AB35		±12 VDC	±125 mA	3 mA	82 mA	76	
EC3AB36		±15 VDC	±100 mA	3 mA	82 mA	76	
EC3AB37		3.3 VDC	600 mA	3 mA	58 mA	71	

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

RSG ELECTRONIC COMPONENTS
RSG Electronic Components GmbH ▪ Sprendlinger Landstr. 115 ▪ D-63069 Offenbach/Germany
Tel. +49 69 984047-0 ▪ Fax +49 69 984047-77 ▪ info@rsg-electronic.de ▪ www.rsg-electronic.de

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.
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)
Weight: 15g

ISOLATION VOLTAGE:

500 VDC min: Standard Models
3K VDC min[4]: Suffix "H" Models

CASE MATERIAL:

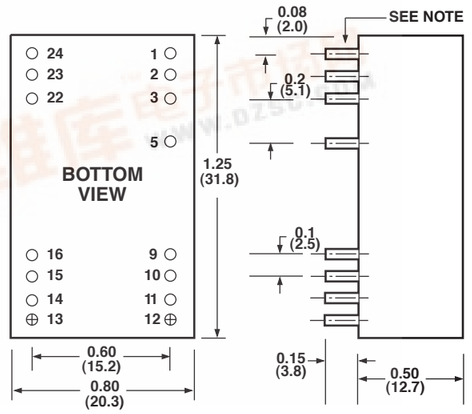
Standard Models: Non-Conductive Black Plastic
Suffix "M" Models[5]: Black Coated Copper with Non-Conductive Base

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"/"HM" Versions Only

CASE A

NOTE:Pin Size is 0.02" Inch (0.5mm) DIA
All Dimensions In Inches(mm)
Tolerance .xx= ±.02, .xxx= ±.010



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
Control Common	Referenced to Input Minus

PIN CONNECTION

Pin	500 VDC Single Output	500 VDC Dual Output	Pin	1.5K & 3K VDC Single Output	1.5K & 3K VDC 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.