

EC3A

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

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	% EFF.	CASE
EC3A01	4.5-6.0 VDC	5 VDC	600 mA	15 mA	850 mA	70	A
EC3A02		12 VDC	250 mA	15 mA	800 mA	75	
EC3A03		15 VDC	200 mA	15 mA	800 mA	75	
EC3A04		±5 VDC	±300 mA	25 mA	850 mA	70	
EC3A05		±12 VDC	±125 mA	25 mA	800 mA	75	
EC3A06		±15 VDC	±100 mA	25 mA	800 mA	75	
EC3A07		3.3 VDC	600 mA	15 mA	619 mA	64	
EC3A11	9-18 VDC	5 VDC	600 mA	7.5 mA	340 mA	73	A
EC3A12		12 VDC	250 mA	7.5 mA	320 mA	78	
EC3A13		15 VDC	200 mA	7.5 mA	320 mA	78	
EC3A14		±5 VDC	±300 mA	12 mA	340 mA	73	
EC3A15		±12 VDC	±125 mA	12 mA	320 mA	78	
EC3A16		±15 VDC	±100 mA	12 mA	320 mA	78	
EC3A17		3.3 VDC	600 mA	7.5 mA	236 mA	70	
EC3A21	18-36 VDC	5 VDC	600 mA	5 mA	168 mA	74	A
EC3A22		12 VDC	250 mA	5 mA	156 mA	80	
EC3A23		15 VDC	200 mA	5 mA	156 mA	80	
EC3A24		±5 VDC	±300 mA	7.5 mA	168 mA	74	
EC3A25		±12 VDC	±125 mA	7.5 mA	156 mA	80	
EC3A26		±15 VDC	±100 mA	7.5 mA	156 mA	80	
EC3A27		3.3 VDC	600 mA	5 mA	113 mA	73	
EC3A31	36-72 VDC	5 VDC	600 mA	2 mA	82 mA	76	A
EC3A32		12 VDC	250 mA	2 mA	78 mA	80	
EC3A33		15 VDC	200 mA	2 mA	78 mA	80	
EC3A34		±5 VDC	±300 mA	3 mA	82 mA	76	
EC3A35		±12 VDC	±125 mA	3 mA	80 mA	78	
EC3A36		±15 VDC	±100 mA	3 mA	80 mA	78	
EC3A37		3.3 VDC	600 mA	3 mA	58 mA	71	

NOTE: 1. Nominal Input Voltage 5, 12, 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	5V.....	4.5-6V
	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.....	± 0.5%
Load Regulation, Single.....	± 0.5%
Dual.....	± 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
Dimensions.....	1.25 x 0.8 x 0.4 inches (31.8 x 20.3 x 10.2 mm)
Weight.....	12.5g

ISOLATION VOLTAGE:

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

CASE MATERIAL:

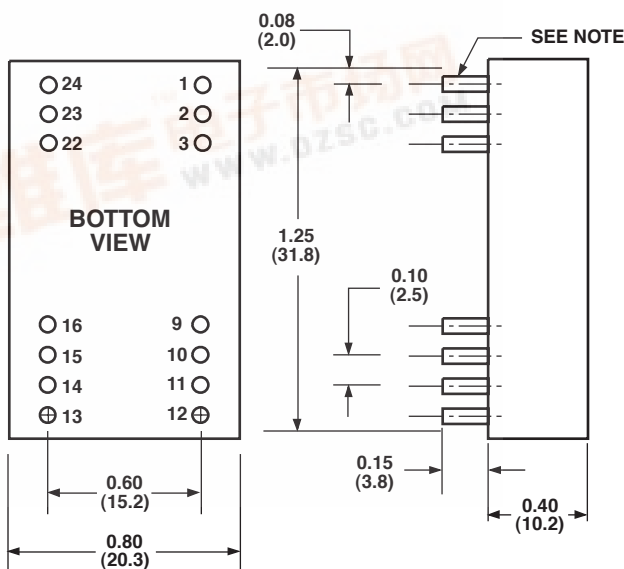
Standard Models.....	Non-Conductive Black Plastic
Suffix "M" Models.....	Black Coated Copper with Non-Conductive Base

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 "HM" 1.5K VDC Instead of 3K VDC Isolation

CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA
All Dimensions in Inches(mm)
Tolerance .xx= ±0.02, .xxx= ±0.010



PIN CONNECTION					
Pin	500 VDC Single Output	Dual Output	Pin	1.5K & 3K VDC 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
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