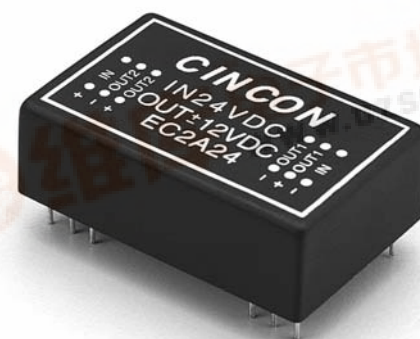


# EC2A

## 1.5 WATT DC-DC CONVERTERS



### Features

- 24-Pin DIP Package
- Regulated Outputs
- 50% Efficiency
- Pi Input Filter
- Low Ripple and Noise

| MODEL NUMBER | INPUT VOLTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT | INPUT CURRENT NO LOAD | INPUT CURRENT FULL LOAD | CASE |
|--------------|---------------|----------------|----------------|-----------------------|-------------------------|------|
| EC2A01       | 5 VDC         | 5 VDC          | 300 mA         | 110 mA                | 620 mA                  | A    |
| EC2A02       |               | 12 VDC         | 125 mA         |                       | 550 mA                  |      |
| EC2A03       |               | 15 VDC         | 100 mA         |                       | 550 mA                  |      |
| EC2A04       |               | ±12 VDC        | ±60 mA         |                       | 550 mA                  |      |
| EC2A05       |               | ±15 VDC        | ±50 mA         |                       | 550 mA                  |      |
| EC2A11       | 12 VDC        | 5 VDC          | 300 mA         | 40 mA                 | 260 mA                  | A    |
| EC2A12       |               | 12 VDC         | 125 mA         |                       | 215 mA                  |      |
| EC2A13       |               | 15 VDC         | 100 mA         |                       | 215 mA                  |      |
| EC2A14       |               | ±12 VDC        | ±60 mA         |                       | 215 mA                  |      |
| EC2A15       |               | ±15 VDC        | ±50 mA         |                       | 215 mA                  |      |
| EC2A21       | 24 VDC        | 5 VDC          | 300 mA         | 20 mA                 | 130 mA                  | A    |
| EC2A22       |               | 12 VDC         | 125 mA         |                       | 115 mA                  |      |
| EC2A23       |               | 15 VDC         | 100 mA         |                       | 115 mA                  |      |
| EC2A24       |               | ±12 VDC        | ±60 mA         |                       | 115 mA                  |      |
| EC2A25       |               | ±15 VDC        | ±50 mA         |                       | 115 mA                  |      |
| EC2A31       | 28 VDC        | 5 VDC          | 300 mA         | 20 mA                 | 110 mA                  | A    |
| EC2A32       |               | 12 VDC         | 125 mA         |                       | 100 mA                  |      |
| EC2A33       |               | 15 VDC         | 100 mA         |                       | 100 mA                  |      |
| EC2A34       |               | ±12 VDC        | ±60 mA         |                       | 100 mA                  |      |
| EC2A35       |               | ±15 VDC        | ±50 mA         |                       | 100 mA                  |      |
| EC2A41       | 48 VDC        | 5 VDC          | 300 mA         | 15 mA                 | 65 mA                   | A    |
| EC2A42       |               | 12 VDC         | 125 mA         |                       | 60 mA                   |      |
| EC2A43       |               | 15 VDC         | 100 mA         |                       | 60 mA                   |      |
| EC2A44       |               | ±12 VDC        | ±60 mA         |                       | 60 mA                   |      |
| EC2A45       |               | ±15 VDC        | ±50 mA         |                       | 60 mA                   |      |

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage Range.....±10%  
Input Filter.....PI Type

#### OUTPUT SPECIFICATIONS:

Voltage Accuracy.....± 4.0% max.  
Temperature Coefficient.....± 0.02% / °C  
Ripple and Noise, 20MHz BW.....50mV p-p max.  
Short Circuit Protection.....Momentary  
Line Regulation.....± 0.3%  
Load Regulation.....± 0.5%

#### GENERAL SPECIFICATIONS:

Efficiency.....50%  
Isolation Capacitance.....30pF  
Isolation Resistance.....10<sup>9</sup> ohms  
Switching Frequency.....20KHz, 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 10.2mm)  
Weight.....12.5g

#### ISOLATION VOLTAGE:

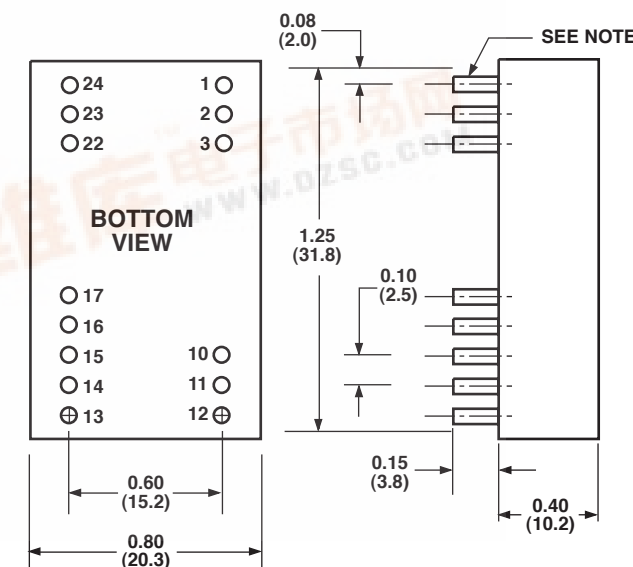
500 VDC min.....Standard Models  
3K VDC min.....Suffix "H" Models

#### CASE MATERIAL:

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

### CASE A

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



| PIN CONNECTION |               |             |          |               |             |
|----------------|---------------|-------------|----------|---------------|-------------|
| 500 VDC        |               |             | 3K VDC   |               |             |
| Pin            | Single Output | Dual Output | Pin      | Single Output | Dual Output |
| 1 24           | +V Input      | +V Input    | 1 2,3    | +V Input      | +V Input    |
| 2 23           | NC            | -V Output   | 22,23,24 | -V Input      | -V Input    |
| 3 22           | NC            | Common      | 10 11    | NP            | Go Output   |
| 10             | -V Output     | Common      | 12       | -V Output     | -TP         |
| 11             | +V Output     | +V Output   | 13       | +V Output     | -V Output   |
| 12             | -V Input      | -V Input    | 14       | NP            | NP          |
| 13             | -V Input      | -V Input    | 15       | NP            | +V Output   |
| 14             | +V Output     | +V Output   | 16       | NP            | +TP         |
| 15             | -V Output     | Common      | 17       | +TP           | NP          |

\*NP-NO PIN  
\*NC-NO CONNECTION WITH PIN  
\*TP-TEST POINT  
\*GO-GROUND