

EC2AN

1.0 TO 1.5 WATT DC-DC CONVERTERS



Features

- 24-Pin DIP Package
- Pi Input Filter
- Unregulated Outputs
- Low Ripple and Noise
- 70% Efficiency

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE
				NO LOAD	FULL LOAD	
EC2A01N		5 VDC	220mA	115 mA	330 mA	
EC2A02N		12 VDC	125 mA	115 mA	420 mA	
EC2A03N	5 VDC	15 VDC	100 mA	115 mA	420 mA	A
EC2A04N		±12 VDC	±62 mA	115 mA	420 mA	
EC2A05N		±15 VDC	±50 mA	115 mA	420 mA	
EC2A11N		5 VDC	220 mA	45 mA	120 mA	
EC2A12N		12 VDC	125 mA	45 mA	165 mA	
EC2A13N	12 VDC	15 VDC	100 mA	45 mA	165 mA	A
EC2A14N		±12 VDC	±62 mA	45 mA	165 mA	
EC2A15N		±15 VDC	±50 mA	45 mA	165 mA	

Specifications

INPUT SPECIFICATIONS:

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

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....±3.0% max.
 Ripple and Noise, 20MHz BW¹.....100mV p-p max.
 Short Circuit Protection.....Momentary
 Line Regulation².....±1.2%
 Load Regulation³, EC2A01N.....±8.0%
 All Other Models.....±6.0%

GENERAL SPECIFICATIONS:

Efficiency.....60%-80%
 Isolation Capacitance.....30pF
 Isolation Resistance.....10⁹ohms
 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)

ISOLATION VOLTAGE:

500 VDC min.....Standard Models
 3K VDC min⁴.....Suffix "H" Models

CASE MATERIAL:

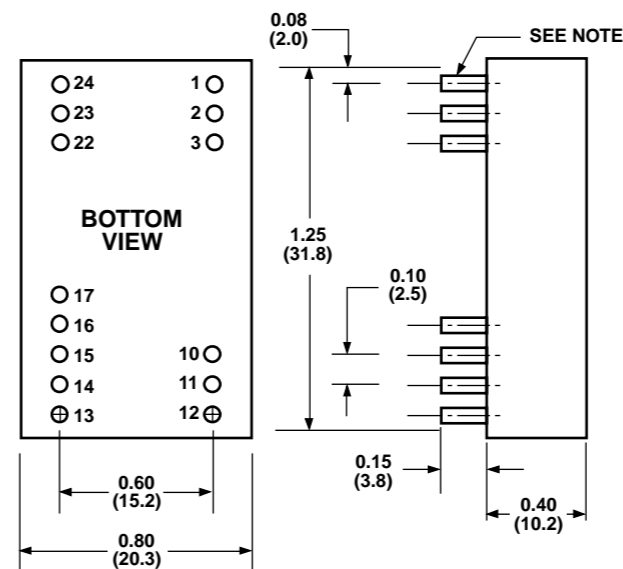
Standard Models.....Non-Conductive Black Plastic
 Suffix "M" Models.....Black Coated Copper
 with Non-Conductive Base

NOTE:

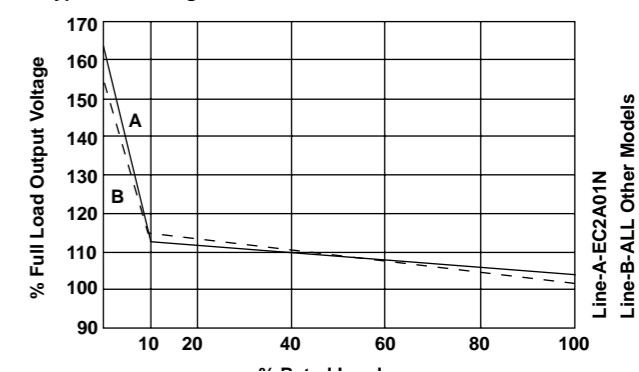
1. 15 µF 35V, Tantalum Capacitor Across Each Output.
2. Line regulation is per 1.0% change in input voltage.
3. Load regulation is for load change from 100% to 20% See graph of load regulation.
4. Suffix "HM" 1.5K VDC Instead of 3K VDC Isolation

CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA or .020 x .014 Inch
 All Dimensions In Inches(mm)
 Tolerance .xx= ±.02, .xxx= ±.010



Typical Load Regulation



PIN CONNECTION

Pin	500 VDC		Pin	1.5K & 3K VDC	
	Single Output	Dual Output		Single Output	Dual Output
1 24	+V Input	+V Input	1 2,3	+V Input	+V Input
2 23	NC	-V Output	2,23,24	-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 *TP-TEST POINT
 *NC-NO CONNECTION WITH PIN *GO-GROUND