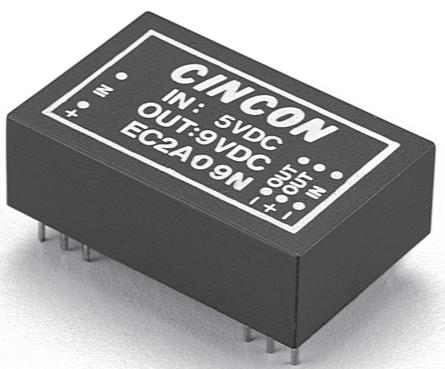


**LAN-1**

S E R I E S

## 1 TO 2 WATT LAN DC-DC CONVERTERS



### Features

- 1-2W Output Power
- DIP-24 Package
- Pi Input Filter
- Input Voltage 5V & 12V

| MODEL NUMBER       | INPUT VOLTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT | INPUT CURRENT |           | PIN CONN. | CASE   |
|--------------------|---------------|----------------|----------------|---------------|-----------|-----------|--------|
|                    |               |                |                | NO LOAD       | FULL LOAD |           |        |
| <b>REGULATED</b>   |               |                |                |               |           |           |        |
| EC2A09M            | 5 VDC         | 9 VDC          | 140 mA         | 120 mA        | 540 mA    | B         | DIP-24 |
| EC2A19M            | 12 VDC        | 9 VDC          | 140 mA         | 45 mA         | 215 mA    | B         | DIP-24 |
| <b>UNREGULATED</b> |               |                |                |               |           |           |        |
| EC2A09N            | 5 VDC         | 9 VDC          | 250 mA         | 100 mA        | 600 mA    | A         | DIP-24 |
| EC2A19N            | 12 VDC        | 9 VDC          | 250 mA         | 40 mA         | 260 mA    | A         | DIP-24 |

| Pin | A         | B         |   |
|-----|-----------|-----------|---|
| 1   | +V Input  | +V Input  | • External Resistor R1.   |
| 2   | NC*       | +V Input  | • C1=10.0µF 25V Tantalum Capacitor  |
| 3   | NC*       | +V Input  | • R1=100Ω   |
| 9   | No Pin    | Resistor  | • NC=No Connection (With Pin)   |
| 10  | -V Output | +V Output | C1 will improve output noise performance. It is not required for converter operation.   |
| 11  | +V Output | +V Output | is not required for converter operation.  |
| 12  | -V Input  | +V Output | Regulated units only (EC2A09, EC2A19). Pin  |
| 13  | -V Input  | -V Output | 9 provides a preregulated output voltage,   |
| 14  | +V Output | -V Output | which when used as shown above provides   |
| 15  | -V Output | -V Output | for a full load output current of 140 mA, when  |
| 22  | NC*       | -V Input  | load current is less than 60 mA output voltage will rise and for a no load condition it |
| 23  | NC*       | -V Input  | can rise to approximately 13 volts.   |
| 24  | +V Input  | -V Input  |   |

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage ..... 5 or 12VDC  
Input Voltage Range..... ±10%  
Input Filter.....Pi Type

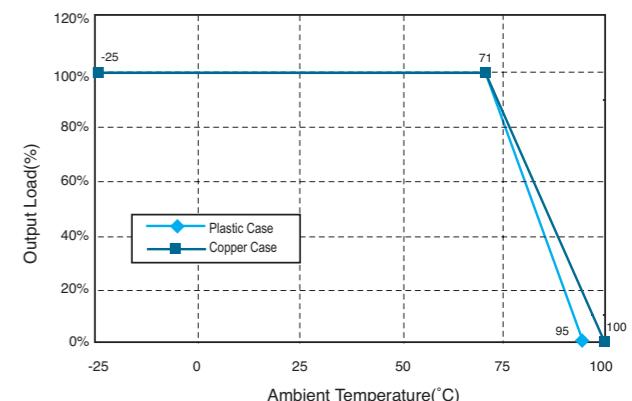
#### OUTPUT SPECIFICATIONS:

Output Voltage..... 9 VDC ..... +10 VDC ..... +5 VDC  
Voltage Accuracy, 9 VDC ..... +5.0% max.  
+10 VDC ..... +4.0%  
+5 VDC ..... +2.0%  
Ripple & Noise, 20MHz BW, 9VDC ..... 100mV p-p  
+10 VDC ..... 300mV p-p  
+5 VDC ..... 300mV p-p  
Short Circuit Protection..... Momentary  
Line Regulation  
Regulated Models..... ±0.3%  
Unregulated Models'..... ±1.2%  
Load Regulation  
Regulated Models<sup>2</sup>..... ±0.5%  
Unregulated Models<sup>3</sup>..... ±6.0%

#### GENERAL SPECIFICATIONS:

Efficiency  
Regulated Models..... 50%  
Unregulated Models..... 70%  
Switching Frequency..... 20KHz, min.  
Isolation Voltage..... 500 VDC min.  
Operating Ambient Temperature Range ..... -25°C to +71°C  
De-rating, Above 71°C (Plastic Case)..... Linearly to Zero power at 95°C  
De-rating, Above 71°C(Copper Case)... Linearly to Zero power at 100°C  
Case Temperature (Plastic case<sup>4</sup>) ..... 95°C max  
(Copper case<sup>4</sup>) ..... 100°C max  
Cooling ..... Natural Convection  
Storage Temperature Range ..... -40°C to +85°C  
Dimensions..... 1.25 x 0.80 x 0.40 inches  
(31.8 x 20.3 x 10.2mm)  
Case Material..... Non-Conductive Black Plastic  
Suffix "M" Model..... Black Coated Copper with  
Non-Conductive Base  
Weight..... 12.5g

### LAN-1 Series Derating Curve

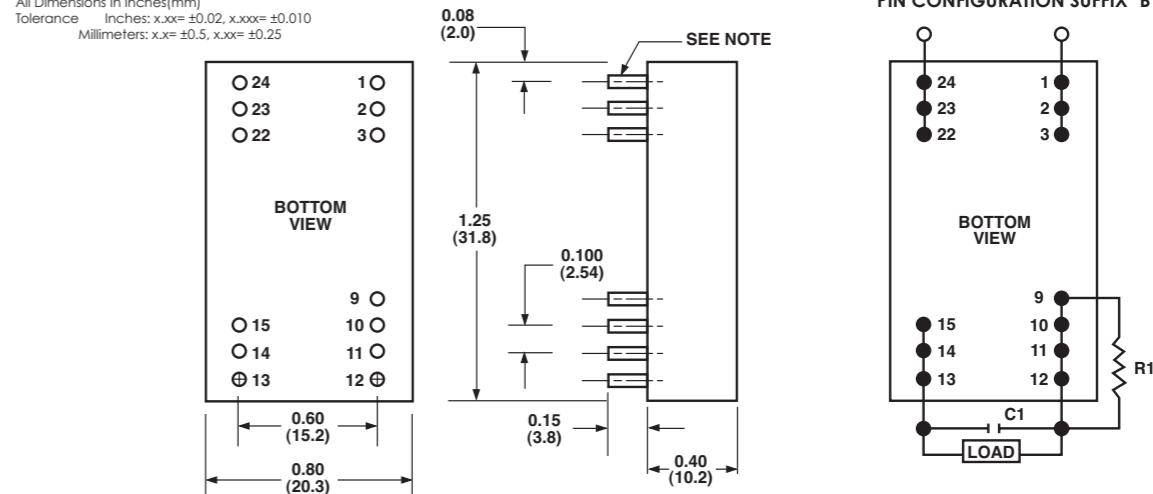


#### NOTE:

1. Per 1% Change in Input Voltage
2. For a Load Change from 60mA to 140mA.
3. For a Load Change from 100% Full Load to 20% Full Load.
4. Maximum case temperature under any operating condition should not exceed 95°C(Plastic Case), 100°C(Copper Case).

### CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA  
All Dimensions In Inches(mm)  
Tolerance   Inches: x.xx=±0.02, xxxx=±0.010  
Millimeters: x.x=±0.5, xxx=±0.25



#### PIN CONFIGURATION SUFFIX "B"

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for [Isolated DC/DC Converters](#) category:***

***Click to view products by [Cincon manufacturer:](#)***

Other Similar products are found below :

[ESM6D044440C05AAQ](#) [FMD15.24G](#) [PSL486-7LR](#) [Q48T30020-NBB0](#) [JAHW100Y1](#) [SPB05C-12](#) [SQ24S15033-PS0S](#) [18952](#) [19-130041](#)  
[CE-1003](#) [CE-1004](#) [GQ2541-7R](#) [RDS180245](#) [MAU228](#) [J80-0041NL](#) [DFC15U48D15](#) [XGS-0512](#) [XGS-1205](#) [XGS-1212](#) [XGS-2412](#) [XGS-2415](#) [XKS-1215](#) [06322](#) [NCT1000N040R050B](#) [SPB05B-15](#) [SPB05C-15](#) [L-DA20](#) [DCG40-5G](#) [QME48T40033-PGB0](#) [XKS-2415](#) [XKS-2412](#) [XKS-1212](#) [XKS-1205](#) [XKS-0515](#) [XKS-0505](#) [XGS-2405](#) [XGS-1215](#) [XGS-0515](#) [PS9Z-6RM4](#) [73-551-5038I](#) [AK1601-9RT](#) [VI-N61-CM](#) [VI-R5022-EXWW](#) [PSC128-7iR](#) [RPS8-350ATX-XE](#) [DAS1004812](#) [PQA30-D24-S24-DH](#) [VI-M5F-CQ](#) [VI-LN2-EW](#) [VI-PJW01-CZY](#)