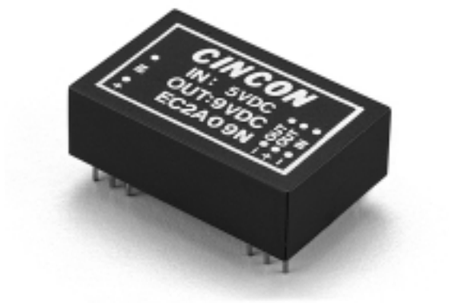
S E R I E S

LAN-1

1 TO 2 WATT LAN DC-DC CONVERTERS



Features

- 24-Pin DIP Package
- Cheapernet Application
- Pi Input Filter
- 5 or 12 VDC Input
- Full Power to +71°C

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	PIN CONN.	CASE
			REGULATED				
EC2A09	5 VDC	9 VDC	140 mA	120 mA	540 mA	B	A
EC2A19	12 VDC	9 VDC	140 mA	45 mA	215 mA	B	A
			UNREGULATED				
EC2A09N	5 VDC	9 VDC	250 mA	100 mA	600 mA	A	A
EC2A19N	12 VDC	9 VDC	250 mA	40 mA	260 mA	A	A

Pin	A	B
1	+V Input	+V Input
2	NC*	+V Input
3	NC*	+V Input
9	No Pin	Resistor
10	-V Output	+V Output
11	+V Output	+V Output
12	-V Input	+V Output
13	-V Input	-V Output
14	+V Output	-V Output
15	-V Output	-V Output
22	NC*	-V Input
23	NC*	-V Input
24	+V Input	-V Input

- External Resistor R1.
- C1=10.0µF 25V Tantalum Capacitor
- R1=100Ω
- NC=No Connection (With Pin)

C1 will improve output noise performance. It is not required for converter operation. Regulated units only (EC2A09, EC2A19). Pin 9 provides a preregulated output voltage, which when used as shown above provides for a full load output current of 140 mA, when load current is less than 60 mA output voltage will rise and for a no load condition it can rise to approximately 13 volts.

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] ..... ±1.2%
Load Regulation
Regulated Models[2] ..... ±0.5%
Unregulated Models[3] ..... ±6.0%

GENERAL SPECIFICATIONS:

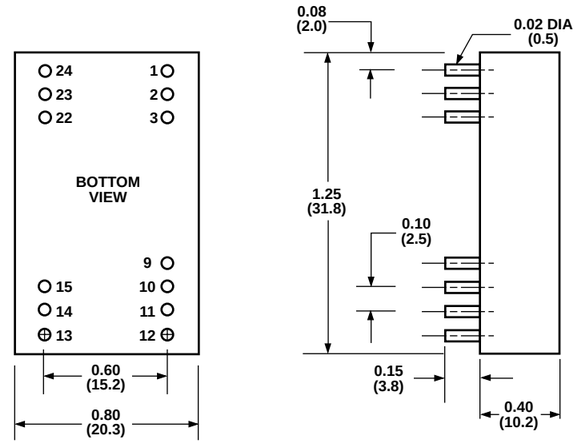
Efficiency
Regulated Models 50%
Unregulated Models 70%
Switching Frequency ..... 20KHz, min.
Isolation Voltage ..... 500 VDC min.
Operating Temperature Range ..... -25°C to + 71°C
Case Temperature ..... 95˚C max.
Cooling ..... Free-Air Convection
Storage Temperature Range ..... -40°C to + 85°C
Dimensions ..... 1.25 x 0.8 x 0.4 inches (31.8 x 20.3 x 10.2mm)
Case Material ..... Non-Conductive Black Plastic

NOTE:

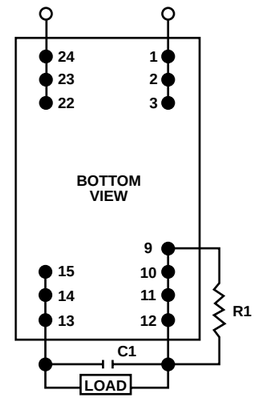
1. Per 1% Change in Input Voltage
2. For a Load Change from 60mA to 140mA.
3. For a Load Change from 100% Full Load to 20% Full Load.

CASE A

NOTE: PIN SIZE IS .020 INCH (0.5mm) DIA. OR .020 x .014 INCH
All Dimensions In Inches (mm)



PIN CONFIGURATION SUFFIX "B"



All Specifications Typical At Nominal Line, Full Load and 25˚C Unless Otherwise Noted.