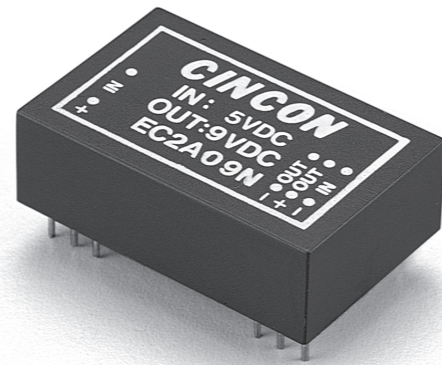


LAN-1

S E R I E S

1 TO 2 WATT LAN DC-DC CONVERTERS



Features

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

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		PIN CONN.	CASE
				NO LOAD	FULL LOAD		
REGULATED							
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
UNREGULATED							
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
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 volt-
23	NC*	-V Input	age will rise and for a no load condition it
24	+V Input	-V Input	can rise to approximately 13 volts.

Specifications

INPUT SPECIFICATIONS:

Input Voltage5 or 12VDC
 Input Voltage Range.....±10%
 Input Filter.....Pi Type

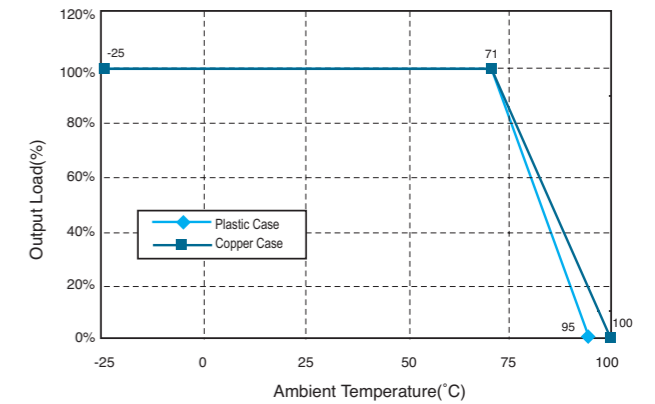
OUTPUT SPECIFICATIONS:

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 Models¹.....±1.2%
 Load Regulation
 Regulated Models².....±0.5%
 Unregulated Models³.....±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 case⁴) 95°C max
 (Copper case⁴) 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(PlasticCase), 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, x.xxx= ±0.010
 Millimeters: x.x= ±0.5, x.xx= ±0.25

