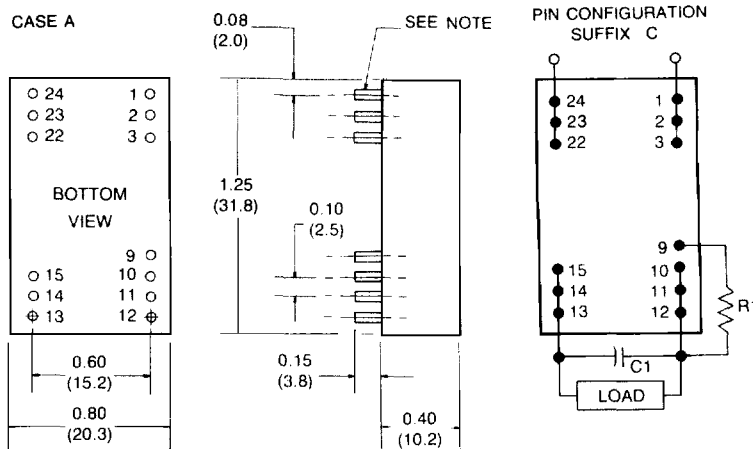


1 to 2 WATT DC/DC CONVERTERS LAN-1 SERIES

- Cheaper Application
- 24-Pin DIP Package
- Full Power to +71°C
- Pi Input Filter
- 5 to 12Vdc Input

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		PIN CONN.	CASE
				NO LOAD	FULL LOAD		
REGULATED							
CEM251	5 VDC	9 VDC	140 mA	120 mA	525 mA	C	A
CEM271	12 VDC	9 VDC	140 mA	45 mA	205 mA	C	A
UNREGULATED							
CEM251NR	5 VDC	9 VDC	250 mA	100 mA	615 mA	A	A
CEM255NR	5 VDC	10½ VDC	100/80 mA	100 mA	385 mA	B	A
CEM271NR	12 VDC	9 VDC	250 mA	40 mA	265 mA	A	A



ALL DIMENSIONS IN INCHES (MM)

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

Pin	A	B	C
1	+ V Input	+ V Input	+ V Input
2	NC	V _o Common	+ V Input
3	NC	+ 5V Output	+ V Input
9	No Pin	No Pin	Resistor
10	- V Output	V _o Common	+ V Output
11	+ V Output	+ 10V Output	+ V Output
12	- V Input	- V Input	+ V Output
13	- V Input	- V Input	- V Output
14	+ V Output	+ 10V Output	- V Output
15	- V Output	V _o Common	- V Output
22	NC	+ 5V Output	- V Input
23	NC	V _o Common	- V Input
24	+ V Input	+ V Input	- V Input

- External Resistor R1.
- C1 = 10.0 μ F 25V Tantalum Capacitor
- R1 = 100 Ω

Pin 9 provides a preregulated output voltage, which when used as shown above provides for a full load output current of 140mA, when load current is less than 60mA output voltage will rise and for a no load condition it can rise to approximately 13 volts.

* NC: NO CONNECTION.

SPECIFICATIONS

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

INPUT SPECIFICATIONS

Input Voltage	5 or 12 VDC
Input Voltage Range	$\pm 10\%$
Input Filter	Pi Network

OUTPUT SPECIFICATIONS

Output Voltage.....	9 VDC
.....	+ 10 VDC
.....	+ 5 VDC
Voltage Accuracy, 9VDC.....	± 5% max
+ 10 VDC.....	± 4%
+ 5 VDC.....	± 2%
Ripple and Noise, 20MHz BW, 9 VDC.....	100mV P-P
+ 10 VDC.....	300mV P-P
+ 5 VDC.....	300mV P-P
Short Circuit protection.....	Short Term
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
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 Material

NOTES:

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.