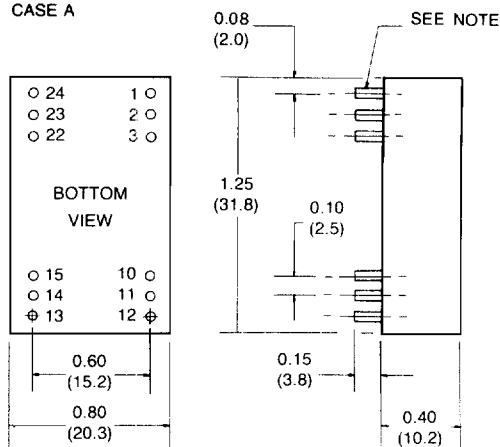


1 to 1.5 WATT DC/DC CONVERTERS CEM200NR SERIES

- 24-Pin DIP Package
- 70% Efficiency
- Unregulated Outputs
- PI Input Filter
- 500Vdc Isolation

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE
				NO LOAD	FULL LOAD	
CEM201NR	5 VDC	5 VDC	220 mA	115 mA	345 mA	A
CEM203NR	5 VDC	12 VDC	125 mA	115 mA	450 mA	A
CEM205NR	5 VDC	15 VDC	100 mA	115 mA	450 mA	A
CEM207NR	5 VDC	± 12 VDC	± 62 mA	115 mA	450 mA	A
CEM209NR	5 VDC	± 15 VDC	± 50 mA	115 mA	450 mA	A
CEM211NR	12 VDC	5 VDC	220 mA	45 mA	125 mA	A
CEM213NR	12 VDC	12 VDC	125 mA	45 mA	170 mA	A
CEM215NR	12 VDC	15 VDC	100 mA	45 mA	170 mA	A
CEM217NR	12 VDC	± 12 VDC	± 62 mA	45 mA	170 mA	A
CEM219NR	12 VDC	± 15 VDC	± 50 mA	45 mA	170 mA	A

CASE A



ALL DIMENSIONS IN INCHES (MM)

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

Pin Connections		
Pin	Single Output	Dual Output
1	+ V Input	+ V Input
2	NC*	- V Output
3	NC*	Common
10	- V Output	Common
11	+ V Output	+ V Output
12	- V Input	- V Input
13	- V Input	- V Input
14	+ V Output	+ V Output
15	- V Output	Common
22	NC*	Common
23	NC*	- V Output
24	+ V Input	+ V Input

SPECIFICATIONS

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

INPUT SPECIFICATIONS

Input Voltage Range ± 10%
Input Filter Pi Network

OUTPUT SPECIFICATIONS

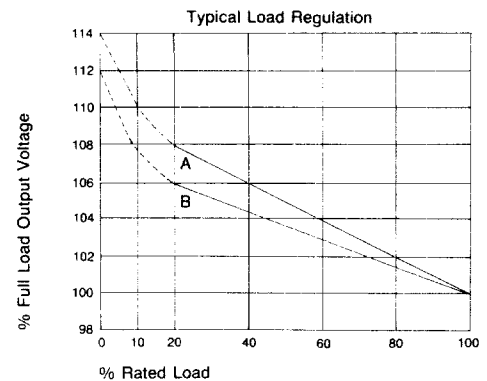
Voltage Accuracy ± 3.0% max.
Ripple and Noise¹, 20MHz BW 100mV P-P max.
Short Circuit Protection Short Term
Line Regulation² ± 1.2%
Load Regulation³, UM201NR ± 8%
All Other Models ± 6%

GENERAL SPECIFICATIONS

Efficiency 60-80%
Isolation Voltage 500 VDC min.
Isolation Capacitance 80pF
Isolation Resistance 10⁹ ohms
Switching Frequency 20kHz, min.
Operating Temperature Range - 25°C to + 71°C
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)
Case Material Non-Conductive Black Plastic

NOTE:

1. 15 μ F 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.



Line A-UM201 NR
Line B-All Other Models