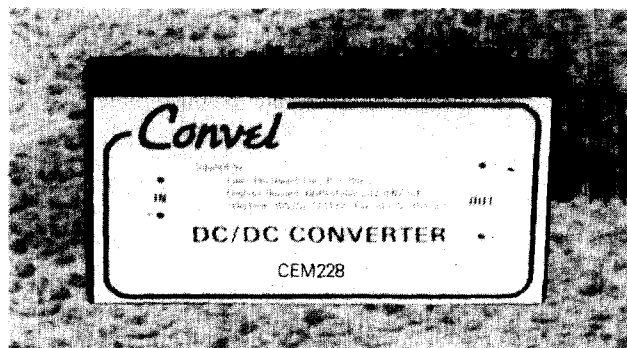


1.5 WATT DC/DC CONVERTERS CEM200 SERIES



- 50% Efficiency
- Regulated Outputs
- Pi Input Filter
- 500 Vdc Isolation
- Low Ripple and Noise

MODEL NUMBER		INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT	
CASE A	CASE B				NO LOAD	FULL LOAD
CEM201	CEM202	5 VDC	5 VDC	300 mA	100 mA	650 mA
CEM203	CEM204	5 VDC	12 VDC	125 mA	110 mA	550 mA
CEM205	CEM206	5 VDC	15 VDC	100 mA	110 mA	550 mA
CEM207	CEM208	5 VDC	+12 VDC	± 60 mA	110 mA	550 mA
CEM209	CEM210	5 VDC	± 15 VDC	± 50 mA	110 mA	550 mA
CEM211	CEM212	12 VDC	5 VDC	300 mA	40 mA	270 mA
CEM213	CEM214	12 VDC	12 VDC	125 mA	40 mA	220 mA
CEM215	CEM216	12 VDC	15 VDC	100 mA	40 mA	220 mA
CEM217	CEM218	12 VDC	± 12 VDC	± 60 mA	40 mA	220 mA
CEM219	CEM220	12 VDC	± 15 VDC	± 50 mA	40 mA	220 mA
CEM221	CEM222	24 VDC	5 VDC	300 mA	20 mA	135 mA
CEM223	CEM224	24 VDC	12 VDC	125 mA	20 mA	115 mA
CEM225	CEM226	24 VDC	15 VDC	100 mA	20 mA	115 mA
CEM227	CEM228	24 VDC	± 12 VDC	± 60 mA	20 mA	115 mA
CEM229	CEM230	24 VDC	± 15 VDC	± 50 mA	20 mA	115 mA
CEM231	CEM232	28 VDC	5 VDC	300 mA	20 mA	120 mA
CEM233	CEM234	28 VDC	12 VDC	125 mA	20 mA	110 mA
CEM235	CEM236	28 VDC	15 VDC	100 mA	20 mA	100 mA
CEM237	CEM238	28 VDC	± 12 VDC	± 60 mA	20 mA	100 mA
CEM239	CEM240	28 VDC	± 15 VDC	± 50 mA	20 mA	100 mA
CEM241	CEM242	48 VDC	5 VDC	300 mA	15 mA	70 mA
CEM243	CEM244	48 VDC	12 VDC	125 mA	15 mA	60 mA
CEM245	CEM246	48 VDC	15 VDC	100 mA	15 mA	60 mA
CEM247	CEM248	48 VDC	± 12 VDC	± 60 mA	15 mA	60 mA
CEM249	CEM250	48 VDC	± 15 VDC	± 50 mA	15 mA	60 mA

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

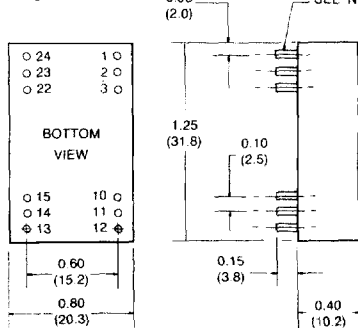
Voltage Accuracy ± 4% max.
Ripple and Noise, 20MHz BW 50mV P-P max.
Temperature Coefficient ± 0.02%/°C
Short Circuit Protection Short Term
Line Regulation ± 0.3%
Load Regulation ± 0.5%

GENERAL SPECIFICATIONS

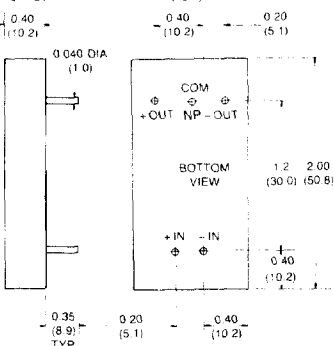
Efficiency 50%
Isolation Voltage 500 VDC min.
Isolation Capacitance 30pF
Isolation Resistance 10⁹ ohms
Switching Frequency 20kHz, min.
Operating Temperature Range - 25°C to + 71°C
Storage Temperature Range - 40°C to + 100°C
Dimensions CASE A 1.25 x 0.8 x 0.4 inches
(31.8 x 20.3 x 10.2mm)
CASE B 2 x 1 x 0.4 inches
(50.8 x 25.4 x 10.2mm)

Case Material
Standard Models Non-Conductive Black Plastic
Suffix "M" Models Black-Coated Copper with
Non-Conductive Base

CASE A



CASE B



ALL DIMENSIONS IN INCHES (MM)
NOTE: PIN SIZE IS .020 INCH (0.5mm) DIA.
OR .020 x .014 INCH

Pin	Pin Connections	
	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

* NP (NO PIN) ON SINGLE OUTPUT MODELS