

## 4CE Series

## 5-6W DC-DC Converters

### Features

- 5-6W Isolation Output
- 2:1 Input Range
- Regulated Outputs
- 82% Efficiency
- Pi Input Filter
- Continuous Short Circuit Protection

Model Number	Input Voltage	Output Voltage	Output Current	Input Current		% Efficiency	Case
				No Load	Full Load		
4CE-01	9-18 VDC	5 VDC	1000 mA	7.5 mA	545 mA	77	C/S
4CE-02		12 VDC	470 mA	7.5 mA	585 mA	80	
4CE-03		15 VDC	400 mA	7.5 mA	625 mA	80	
4CE-04		±12 VDC	±230 mA	12 mA	575 mA	80	
4CE-05		±15 VDC	±190 mA	12 mA	590 mA	80	
4CE-11	18-36 VDC	5 VDC	1000 mA	5 mA	265 mA	78	C/S
4CE-12		12 VDC	470 mA	5 mA	285 mA	82	
4CE-13		15 VDC	400 mA	5 mA	305 mA	82	
4CE-14		±12 VDC	±230 mA	7.5 mA	285 mA	81	
4CE-15		±15 VDC	±190 mA	7.5 mA	295 mA	81	
4CE-21	36-72 VDC	5 VDC	1000 mA	2 mA	133 mA	78	C/S
4CE-22		12 VDC	470 mA	2 mA	143 mA	81	
4CE-23		15 VDC	400 mA	2 mA	154 mA	81	
4CE-24		±12 VDC	±230 mA	3 mA	142 mA	81	
4CE-25		±15 VDC	±190 mA	3 mA	147 mA	81	

Note: Nominal Input Voltage 12, 24, or 48VDC

**Specifications**

**Input Specifications:**

Input Voltage Range.....	12V.....	9-18V
	24V.....	18-36V
	48V.....	36-72V
Input Filter.....	Pi Type	

**Output Specifications:**

Voltage Accuracy.....	+/- 2.0 % max.	
Voltage Balance ( Dual ).....	+/- 1.0 % max.	
Ripple & Noise, 20 MHz BW.....	5V.....	100 mV p-p max.
	12V / 15V.....	1% p-p max.
Temperature Coefficient.....	+/- 0.05 % /°C max.	
Short Circuit Protection.....	Continuous	
Line Regulation <sup>1</sup> Single / Dual Output.....	+/- 0.5 % max.	
Load Regulation Single <sup>2</sup> .....	+/- 0.5 % max.	
	Dual Output <sup>3</sup> .....	+/- 1.0 % max.

**General Specifications :**

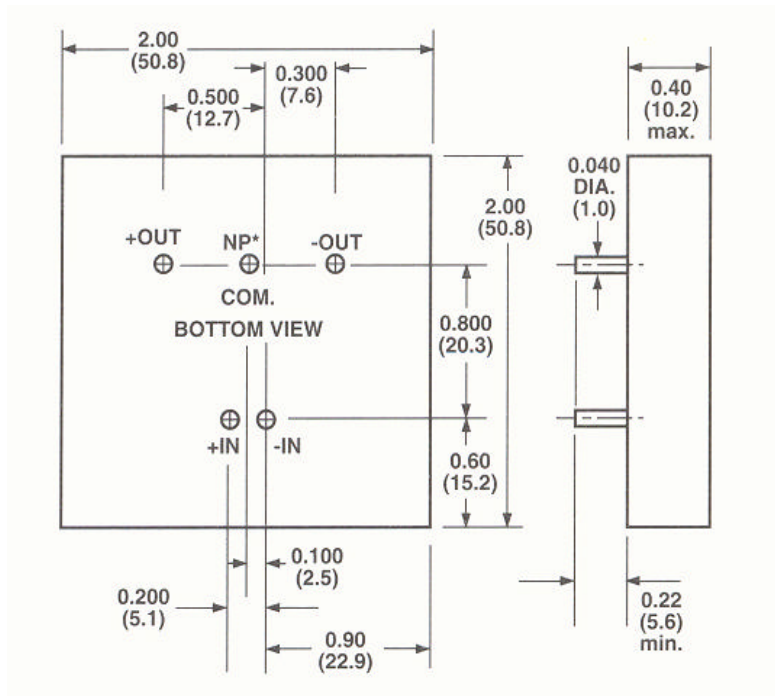
Efficiency.....see table

Isolation Resistance.....	100Mohm	
Switching Frequency.....	100 KHz, min.	
Operating Temperature Range.....	-25° C ~ +71° C	
Case Temperature (plastic case).....	95° C max.	
	(copper case).....	100° C max.
Cooling.....	Free air convection	
Storage Temperature Range.....	-40° C ~ +100° C	
Isolation Voltage.....	500VDC min.	
Dimensions.....	.2" x 2" x 0.4 "(50.8 x 50.8 x 10.2 mm)	
Case Materi.....	Black Coated Copper with Non-conducted base	

Note:

1. Measured from high line to low line
2. Measured form full load to 10% load
3. Measured from full load to ¼load

**Outline Information and Pin-out**



- NP---No Pin
- All dimensions are in inches [mm]

The information and specifications contained in this brief are believed to be accurate and reliable at the time of publication. Specifications are subject to change without notice. Refer to product specification sheet for performance characteristics and application guidelines.