Cool Power Technologies™ 8th Brick 4:1 Series

CPE 4:1 Series

DC/DC

Up To 120W Output Power

- Input Range: 9 - 36Vdc or 18 - 72Vdc
- DOSA Compliant
- High Efficiency
- Remote Shutdown
- Undervoltage Lockout w/hyst

The CPE 4:1 input series high performance DC-DC converters offer high efficiencies of 92% typical (12V model.) This high efficiency allows for minimal output current derating at elevated ambient temperatures. Additional features include trim, remote sense, remote on/off control logic (negative or positive enable) and an operating temperature range of -40°C to +85°C (w/ derating.) These modules conform to industry standard DOSA footprint & feature set. Units are through-hole mount and fit into typical PCB assembly processes.

Applications

These units are ideally suited for telecom, instrumentation, industrial, data processing and networking applications including 'bus' converter applications.

Specifications

INPUT

Voltage Ranges	9 - 36 or 18 - 72 Vdc
Remote ON/OFF control	Neg. or Pos.
UVLO w/hysteresis	

OUTPUT

Nominal Output	1.8,2.5,3.3,5,12 15, 24 or 48Vdc
Setpoint accuracy	± 1.5%
Trim Range	± 10%
Ripple and Noise (TYP)	50mV Pk-Pk
Short Circuit Protection	Auto-restart

GENERAL

Efficiency	92% TYP
Isolation	2250Vdc
Safety	Basic Insulation

ENVIRONMENTAL

Operating Temperature	-40 - +85C
Storage Temperature	-40 - +125C

www.dcdc.com
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SEMICONDUCTOR CIRCUITS, INC.

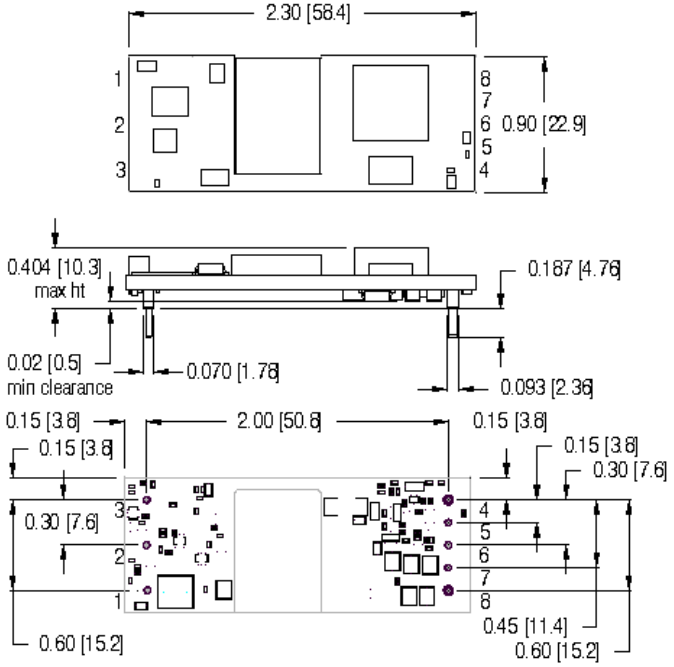
CPE 4:1 Series Ordering Information

Model Number*	Vout (Volts)	Iout (A, max)	Power (W)	Vin Nom. (Volts)	Input Range (Volts)	Ripple (mV P-P)	Efficiency (Typ)
CPE25Y36N	1.8	25	45	48	18 - 72	40	88%
CPE20G36N	2.5	20	50	48	18 - 72	50	90%
CPE30F36N	3.3	30	99	48	18 - 72	50	90%
CPE20A36N	5	20	100	48	18 - 72	60	92%
CPE10B36N	12	10	120	48	18 - 72	80	92%
CPE7C36N	15	7	105	48	20 - 72	80	92%
CPE4D36N	24	4	96	48	18 - 72	100	92%
CPE2U36N	48	2	96	48	18 - 72	100	90%
CPE25Y18N	1.8	25	45	24	9 - 36	50	88%
CPE20G18N	2.5	20	50	24	9 - 36	50	90%
CPE30F18N	3.3	30	99	24	9 - 36	50	90%
CPE20A18N	5	20	100	24	9 - 36	60	92%
CPE8B18N	12	8	96	24	9 - 36	60	92%
CPE5C18N	15	5	75	24	9 - 36	60	92%
CPE4D18N	24	3	96	24	10 - 36	100	92%
CPE2U18N	48	2	96	24	9 - 36	100	90%

*Change "N" suffix to "P" for positive ON/OFF enable logic. Many lower power models available, visit www.dcdc.com

Mechanical Outline & Pin Assignments

Pin Assignment

1. + Vin
2. Enable
3. - Vin
4. - Vout
5. - Sense
6. Trim
7. + Sense
8. +Vout

- All dimensions are in inches [mm]
- Pins 1,2,3,5,6,7 are 0.040" [1.02] dia. with 0.070" [1.78] dia. shoulder
- Pins 4 and 8 are 0.062" [1.57] dia. with 0.093" [2.36] shoulder
- Pin material: Brass
- Pin Finish: Gold over Nickel
- Converter Weight: 0.45 oz [12.8 g]