DPS/DPD Series

DC/DC

2.4 Watts

Single/Dual Outputs

- **MOSFET design**
- **Efficiency to 80%**
- **MTBF in excess of 1,000,000 hours**
- **LC input filter**
- **Operating temperature range: -25°C to +71°C; No derating**

Specifications

INPUT

Voltage Range	4.5 - 5.5 Vdc
Filtering	LC

OUTPUT

Voltage Tolerance	± 3%
Ripple and Noise (PARD)	30mV RMS
Short Circuit Protection	Short term
Temperature Coefficient	0.02% / °C

GENERAL

Regulation:	
Line	1% / % Vin (typ.)
Load	See Load Curve
Efficiency	75 - 80%
I/O Isolation	500 Vdc
Switching Frequency	50kHz

ENVIRONMENTAL

Operating Temperature	-25°C to +71°C No Derating
Storage Temperature	-25°C to +85°C
Cooling	Free-air Convection

All specifications are typical at nominal line and full load at 25°C unless otherwise noted and are subject to change without notice.

The DPS/DPD is an economically priced series of miniature DC/DC converters offering both single and dual outputs. These unregulated converters offer the latest in MOSFET technology. Featuring efficiencies to 80% and a calculated MTBF in excess of 1,000,000 hours. Additional features include an operating temperature range of -25°C to +71°C with no derating and a LC input filter to reduce the reflected ripple. All this in a package measuring 1.1” x 1.1” x 0.5” high make these converters ideally suited for 0.75” card spacing

Applications

The DPS/DPD Series is ideally suited for many microprocessor and memory applications. For user convenience all dual output models can deliver full rated output power from either side. Applications include process control, telecommunications, automatic test equipment and battery operated equipment requiring isolation.

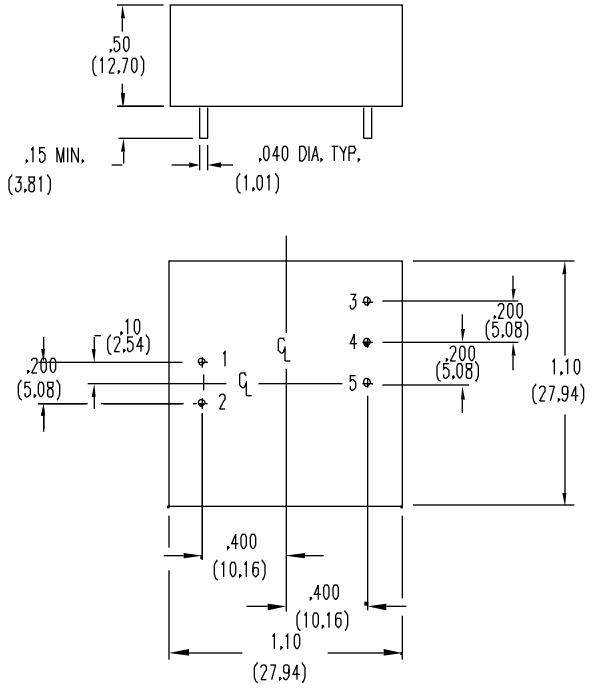
888.438.3232 888.GET.DCDC

SEMICONDUCTOR CIRCUITS, INC.

DPS/DPD Series Ordering Information

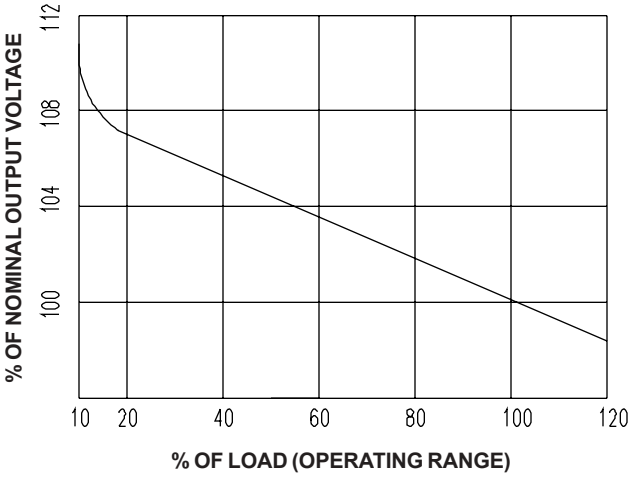
Input Voltage Range	Output Voltage	Output Current	Model Number
4.5-5.5Vdc	5Vdc	180mA	DPS11-018-05
4.5-5.5Vdc	5Vdc	450mA	DPS11-045-05
4.5-5.5Vdc	12Vdc	75mA	DPS12-007-05
4.5-5.5Vdc	12Vdc	200mA	DPS12-020-05
4.5-5.5Vdc	±12 Vdc	±38mA	DPD22-008-05
4.5-5.5Vdc	±12 Vdc	±100mA	DPD22-020-05
4.5-5.5Vdc	±15Vdc	±30mA	DPD23-006-05
4.5-5.5Vdc	±15Vdc	±80mA	DPD23-016-05

Dimensions and Connections



BOTTOM VIEW
ALL DIMENSIONS ARE IN INCHES (mm)

LOAD CURVE (typ)



PIN CONNECTIONS
Single Output
1. - Input
2. + Input
3. + Output
4. - Output
5. Do not connect

PIN CONNECTIONS
Dual Outputs
1. - Input
2. + Input
3. + Output
4. Common
5. - Output

NOTES:
1. Pins 0.040 (1.0) Dia. x 0.15 (3.8) lg min.
2. All dimensions are in inches and (mm).
3.Ripple measured with a 3.3mf tantalum capacitor across each output.

11/01/2001

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