

# DPU Series

## DC/DC

### 3.0 to 3.6 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	80% (typ)
I/O Isolation	500 Vdc
Switching Frequency	50kHz

### ENVIRONMENTAL

Operating Temperature	-25°C to +71°C No Derating
Storage Temperature	-25°C to +105°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 DPU 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 1.25" x 0.8" x 0.4 high.

## Applications

The DPU 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 (including Ethernet), automatic test equipment, etc.



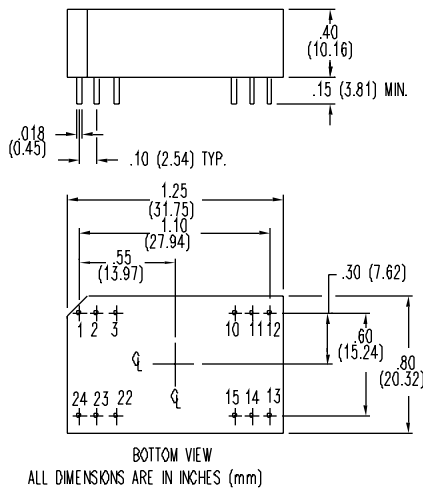
**SEMICONDUCTOR  
CIRCUITS, INC.**

800.438.3232 888.GET.DCDC

# DPU Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Model Number
4.5-5.5Vdc	5Vdc	600mA	DPU11-060-05
4.5-5.5Vdc	9Vdc	330mA	DPU19-033-05
4.5-5.5Vdc	12Vdc	300mA	DPU12-030-05
4.5-5.5Vdc	15 Vdc	240mA	DPU13-024-05
4.5-5.5Vdc	±12 Vdc	±150mA	DPU22-030-05
4.5-5.5Vdc	±15Vdc	±120mA	DPU23-024-05

## Dimensions and Connections



### PIN CONNECTIONS

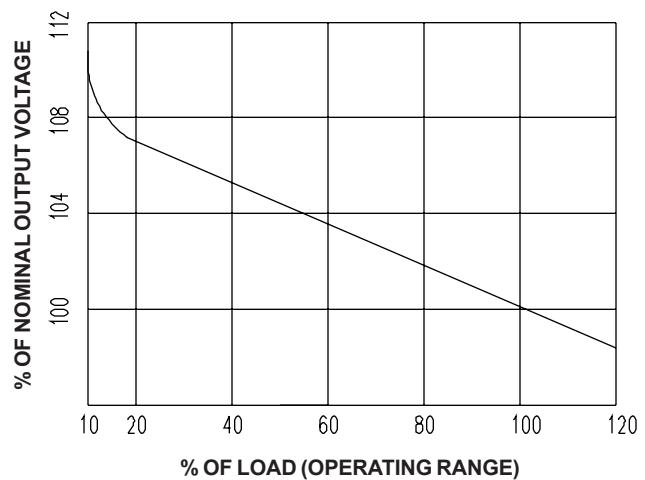
#### Single Output

- 1. & 24. +Input
- 2. & 23. No Connect
- 3. & 22. - Output
- 10. & 15. - Output
- 11. & 14. +Output
- 12. & 13. -Input

### NOTES:

- 1. Twelve pins 0.018 (0.5) square 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.

### LOAD CURVE (typ)



### PIN CONNECTIONS

#### Dual Outputs

- 1. & 24. +Input
- 2. & 23. - Output
- 3. & 22. Common
- 10. & 15. Common
- 11. & 14. +Output
- 12. & 13. -Input

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