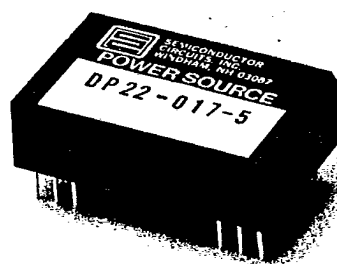


**NEW**

# DP Series

**Up to 2.4 Watts  
Single and Dual Outputs  
DC/DC Converters**



*Shown actual size*

## Features:

- Output power to 2.4 watts
- 500 Vdc isolation
- 24 pin DIP-compatible packaging
- Regulated outputs
- Input filtering
- Switching frequency of 200 kHz
- Two-year warranty



**SEMICONDUCTOR  
CIRCUITS, INC.**

A Subsidiary of Powertec, Inc.

# DP Series

## Product Specifications

### Specifications:

|                          |                               |
|--------------------------|-------------------------------|
| Vin-Nominal              | 5 Vdc                         |
| Input Voltage Range      | ±5%                           |
| Input Reflected Ripple   | 20 mA p-p (typ. at full load) |
| Input Filtering          | Yes - All Units               |
| Output Voltage Tolerance | ±5% (max)                     |
| Ripple and Noise         | 20 mV p-p (max)*              |
| Current Limiting         | Yes                           |
| Short Circuit Protection | Continuous - Auto Restart     |
| Regulation:              |                               |
| Line                     | .2%                           |
| Load                     | .5%                           |
| Efficiency               | 60% (typ)                     |
| I/O Isolation            | 500 Vdc                       |
| Switching Frequency      | 200 kHz                       |
| Operating Temp Range     | -25°C to +71°C                |
| Storage Temp Range       | -40°C to +85°C                |
| Size                     | 1.25 x .8 x .4 inches         |

### Ordering Information:

| Input Voltage | Output Voltage | Maximum Current (AT) |        |        | Model Number |
|---------------|----------------|----------------------|--------|--------|--------------|
|               |                | 50°C                 | 60°C   | 70°C   |              |
| 5 Vdc         | 5 Vdc          | 300 mA               | 300 mA | 300 mA | DP11-030-5   |
| 5 Vdc         | 9 Vdc          | 200 mA               | 200 mA | 200 mA | DP19-020-5   |
| 5 Vdc         | 12 Vdc         | 200 mA               | 175 mA | 150 mA | DP12-020-5   |
| 5 Vdc         | 15 Vdc         | 160 mA               | 140 mA | 120 mA | DP13-016-5   |
| 5 Vdc         | ±12 Vdc        | 85 mA                | 85 mA  | 80 mA  | DP22-017-5   |
| 5 Vdc         | ±15 Vdc        | 70 mA                | 70 mA  | 65 mA  | DP23-014-5   |

### Pin Connection:

| Pin     | Singles  | Duals      |
|---------|----------|------------|
| 1 & 24  | +Vdc In  | +Vdc In    |
| 2 & 23  | N.C.     | -Vdc Out   |
| 3 & 22  | -Vdc Out | Common Out |
| 10 & 15 | -Vdc Out | Common Out |
| 11 & 14 | +Vdc Out | +Vdc Out   |
| 12 & 13 | -Vdc In  | -Vdc In    |

Notes: 1. Twelve pins 0.018 (0.5) square x 0.15 (3.8) lg min.  
2. All dimensions are in inches and (mm).

\*Measured with 3.3 MF 25V tantalum cap. across each output  
Specifications subject to change without notice.

