

## P5WDC48 DC to DC Power Supply Module

### Specifications:

|                       |   |   |
|-----------------------|---|---|
| <b>Input Voltage:</b> |   | 30 to 60VDC   |
| <b>Output:</b>        | Voltage set point accuracy                                    | -1% to +1.5%  |
|                       | Rated power (maximum):  | 5 watts   |
|                       | Ripple & Noise (P-P):   | $\pm 1\%$ of $V_{out}$ in mV maximum (20 MHz bandwidth) |
|                       | Line (Voltage) Regulation:                                    | $\pm 0.5\%$   |
|                       | Load Regulation:  | $\pm 1.0\%$   |
|                       | Temperature coefficient:                                      | $\pm 0.02\%/^{\circ}\text{C}$                           |
| <b>Protection:</b>    | Isolation Voltage (input - output):                           | 1,500VDC  |
|                       | Resistance (input - output):                                  | 1 G ohms minimum  |
|                       | Isolation capacitance:  | 100 pF maximum  |
|                       | Continuous short circuit/ overload protection – auto recovery |   |
|                       |   |   |
| <b>Environmental:</b> | Operating Temperature:  | -25°C to +70°C  |
|                       | Storage Temperature:  | -40°C to +100°C   |
|                       | Humidity (non-condensing):                                    | 95% RH  |

**RoHS compliant**

*All specifications at nominal line voltage, full load and +25°C unless otherwise specified.*

### Physical

Dimensions: 25.4mm (1.00") x 25.4mm (1.00") x 10.2mm (0.40"):  
Weight: 16 grams (0.56 oz.)

| Pin | S (single)        | D (double)        |
|-----|-------------------|-------------------|
| 1   | +V <sub>in</sub>  | +V <sub>in</sub>  |
| 2   | -V <sub>in</sub>  | -V <sub>in</sub>  |
| 3   | +V <sub>out</sub> | +V <sub>out</sub> |
| 4   | No Pin            | COM               |
| 5   | -V <sub>out</sub> | -V <sub>out</sub> |

| Model       | Output      | Current | Efficiency |
|-------------|-------------|---------|------------|
| P5WDC48S05A | +5.1V       | 1,000mA | 74%        |
| P5WDC48S12A | +12V        | 417mA   | 78%        |
| P5WDC48S24A | +24V        | 208mA   | 80%        |
| P5WDC48D12A | +12V & -12V | 208mA   | 80%        |
| P5WDC48D15A | +15V & -15V | 167mA   | 81%        |

**Custom power supply designs** are available to meet the specific application requirements. For a no obligation technical evaluation, please provide the specific performance requirements to [engineering@tichenassociates.com](mailto:engineering@tichenassociates.com) or the address below.