

# PDS15 Series

## 15 Watt Single Output DC/DC Converter

### Features

- Approved to IEC/EN60950, UL60950 safety standards
- Industry standard footprint: 1.65"x1.46"x0.4" (41.90x37.10x10.16mm<sup>3</sup>)
- Typical efficiency: 82%, for 5V<sub>out</sub>
- 2:1 wide input voltage range: 36-75V
- Single output: 3.3V, 5V, 12V, 15V
- Remote control
- Input under-voltage shutdown
- No minimum load requirement
- Output over-current; short-circuit protection (not commended for V<sub>out</sub> 12V, 15V)
- Isolation voltage: 1500V<sub>dc</sub>, 1min (Input-Output; Input-Case; Output-Case)

### Environmental

- Operating ambient temperature range: -40°C to 55°C
- Operating board temperature range: -40°C to 100°C
- Storage temperature range: -55°C to 125°C
- Temperature coefficient: <±0.02%/°C
- MTBF: >2 million hrs

### Electrical Specifications

#### Input

|                               |        |
|-------------------------------|--------|
| Input range:                  | 36-75V |
| Input under-voltage shutdown: | 32-34V |

#### Output

|                            |                                     |
|----------------------------|-------------------------------------|
| Voltage setpoint accuracy: | ±1.0%V <sub>o</sub> max             |
| Voltage adjust:            | None                                |
| Line regulation:           | 10mV max                            |
| Load regulation:           | 25mV max                            |
| Over-current protection:   | >120%I <sub>o</sub> , auto-recovery |
| Short-circuit protection:  | Continuous, auto-recovery           |
| Ripple and noise:          | <60mV <sub>pp</sub> max.            |
| Transient response:        | 200mV max                           |
|                            | Recovery <400us max                 |
|                            | (25%~50%~25% I <sub>o</sub> max)    |
|                            | di/dt: 1A/10uS                      |

#### Control

|                  |                            |
|------------------|----------------------------|
| Control voltage: |                            |
| Positive logic   |                            |
| High = on        | 3.5 to 12V <sub>dc</sub>   |
| Low = off        | -0.7 to 0.6V <sub>dc</sub> |
| Control current: | 2mA max                    |

